DOCUMENT RESUME

ED 155 620 CS 004 137

AUTHOR Beck, Isabel L.; Block, Karen K.
TITLE An Analysis of Two Beginning Reading Programs: Some Facts and Some Opinions.
INSTITUTION Pittsburgh Univ., Pa. Learning Research and Development Center.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
PUB DATE Apr 76
CONTRACT 400-75-0049
NOTE 110p.; Paper presented at the Conference on Theory and Practice of Beginning Reading Instruction, University of Pittsburgh, Learning Research and Development Center, April 1976; For related documents, see CS 004 132-133, CS 004 135, CS 004 137-173, ED 125 315 and ED 145 399; Best copy available

EDRS PRICE MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS *Basic Reading; *Beginning Reading; Comparative Analysis; Comprehension Development; Phoneme Grapheme Correspondence; Phonics; Primary Education; Reading Comprehension; *Reading Instruction; Reading Materials; *Reading Programs; Sight Method; *Textbook Evaluation; Word Recognition
IDENTIFIERS *Ginn 720 Reading Program; *Palo Alto Reading Program (1973)

ABSTRACT

The instruction provided by two beginning reading programs (the Ginn 720 and the Palo Alto 1973 reading programs) are analyzed and compared in this paper on the basis of such factors as phoneme-grapheme correspondence and phonics instruction, sight word learning, and the development of reading comprehension. The comparison focuses primarily on the teaching aspects of the programs. The discussion of comparative data includes descriptions and defenses of the criteria used, facts about each program's treatment of each instructional area, and evaluative statements about both programs regarding the child who has difficulty learning to read. The study concludes that both programs have positive aspects; overall preference goes to Ginn's correspondence sequencing, its corpus of sight words, and its stories, while the Palo Alto program provides better designed phonics instruction and more opportunities to apply learned correspondences to connected text. (The discussion following presentation of the paper is attached.) (RL)

An Analysis of Two Beginning Reading Programs: Some Facts and Some Opinions

Isabel L. Beck

Learning Research and Development Center

University of Pittsburgh

Karen K. Block

Learning Research and Development Center

University of Pittsburgh

Conferences supported by a grant to the Learning Research and Development Center from the National Institute of Education (NIE), United States Department of Health, Education, and Welfare, as part of NIE's Compensatory Education Study. The opinions expressed do not necessarily reflect the position or policy of NIE, and no official endorsement should be inferred. NIE Contract #400-75-0049

This paper was presented at the conference on Theory and Practice of Beginning Reading Instruction, University of Pittsburgh, Learning Research and Development Center, April 1976.

An Analysis of Two Beginning Reading Programs: Some Facts and Some Opinions

Beginning reading programs, designed and developed by commercial publishers, have an important influence both on the chances that children will learn to read and the speed and ease with which learning to read comes about. Although the implementation of these programs undoubtedly varies with individual teachers, there is evidence (Diederich, 1973) that the instructional strategies, found in the Teacher's Manuals accompanying commercial programs, heavily influence the teachers' classroom behavior. Our personal experiences support this evidence, indicating that many teachers rely on the content sequence and instructional strategies specified in the Teacher's Manual. Hence, the type of basic program is one ingredient, along with many others, that shapes the nature of classroom reading practices. Our work here in analyzing two beginning reading programs is one way of documenting the form that shaping takes. We are keenly aware, however, that data about programs are not data about actual teaching procedures that one can observe in beginning reading classrooms.

In this paper, we will describe and analyze two beginning reading programs. One program, the Ginn 720 Reading Program (1976), was selected on the basis of its potential widespread appeal. Its predecessor, the Ginn 360 reading program published in 1969, was used with over 15 million children,[1] and one can expect the 720 program to follow suit

as it becomes available for full scale implementation. Ginn notes that its 720 program is not designed for pupils with learning difficulties, so its selection might at first seem inappropriate for a conference focused on the needs of the compensatory child. We have not attempted to define a compensatory child--but have kept in mind as our target population children who do not learn to read easily after having been exposed to so called "normal" instruction. Because of Ginn's predicted popularity, it will almost certainly be used with large numbers of children who will have difficulty learning to read. Thus, it is important to get some sense of its ability to teach these children to read.

A second reason for the selection of the Ginn program was our interest in its handling of phonics instruction. Since the pioneering work of Jeanne Chall, the need for earlier, more systematic instruction in phonics has become widely accepted. Popp (1975) has noted that phonics instruction appears to be starting earlier in some of the newer basal reading programs, suggesting that commercial series have been influenced by the findings of Chall. There is also some evidence from a rather well controlled comparative study (Bliesmer & Yarborough, 1965) that pupils' reading achievement varies with type of phonics programs. We decided that an in-depth look at contemporary methods of phonics instruction was both pertinent to the purpose of this conference and timely for documenting the directions taken and changes made in this important area of reading instruction.

To provide a baseline and point of contrast with the Ginn 720

program, we have chosen to compare it to a code-emphasis program specifically targeted for children who have difficulty learning to read. We selected the Palo Alto (1973) reading program, whose target population, as described in its promotional materials, includes children with "....limited oral language development, children with below average learning abilities, those with perceptual difficulties." We suspected that, because each program does certain things well, any recommendations we might make about instruction in reading for the child who has difficulty learning to read would be a synthesis of the positive aspects of both programs.

Another reason for comparing two quite different programs came from our interpretation of the task that was to be conducted for this conference, the task of program analysis. We interpreted this task broadly, with an eye to the eventual creation of methods for comparing programs. These comparisons would be made in terms of instructional variables that address important aspects of a program's design and reflect the quality of its suggested teaching strategies. To work out such procedures of analysis for beginning reading programs one has to begin with clearly contrasting cases to capture the range of structural and instructional differences. We view our work here as a tentative start toward the development of such methods.

Reading programs, of course, can be analyzed and compared along a large number of structural and instructional dimensions. Our selection of program characteristics for detailed study, review and comment was influenced by several considerations. Since we believe

that the primary objective of beginning reading instruction is the acquisition of decoding skills, we focused the major part of our analysis on variables that we felt, on the basis of research, theory or practical experience, may make differences in the ease of acquiring and the eventual fluency of word attack and word recognition abilities. These variables fall into three general categories: what is taught, i.e., the subject matter--facts, rules, concepts; when it is taught, i.e., time and order variables--before, after, during, early, late, etc.; and the how of teaching. Analyzing the how of teaching consisted of analyzing the instructional strategies, the instructional task plus the directions, prompts, etc. that are recommended for teachers to use when imparting new content. We have also described provisions made for maintenance, review and application of previously learned content, and noted the provisions made for maintaining interest and motivation to read. We make no claim that our analysis is exhaustive in the sense of evaluating all the program variables that may have an important influence on learning to read.

After comparing the manner in which each of our programs handles each of the above variables, we have made our preferences for a particular approach known. Our preferences are based on concerns about aspects of learning to read, such as the presence of conditions, associated with a particular variable, that could lead to the development of habits of responding that can interfere with or enhance the acquisition of subsequent capabilities. Possible sources of difficulty associated with a given program characteristic are noted throughout

the body of the paper when evaluative statements are made and preferences advanced.

Definition of Reading: Programs' Scope and Materials.

Program developers' definitions of reading have important instructional consequences. They influence the selection of content taught and the teaching procedures used in beginning reading. While a definition provides an incomplete specification of all the design decisions entailed in a beginning reading program, some aspects of content and structure are affected.

It is noteworthy here that the two programs under consideration have different definitions of reading. The Ginn 720 program recognizes that reading is a multifaceted concept: it is decoding; it is comprehending the author's message; it is critical evaluation and it is using ideas. Viewed within the current array of definitions of reading, Ginn accepts a very comprehensive, broadly inclusive definition of reading. This has led, in turn, to the development of seven strands, or categories, of content for a reading program that spans kindergarten through sixth grade. These seven strands are further subdivided into three "Core" strands and four "Application/Enrichment" strands. The Ginn program calls its core strands Decoding, Comprehension and Vocabulary.[2] The four Application/Enrichment strands are called Study Skills, Creativity, Language and Literature. In this paper, we limit our study to the "Core" strands: Decoding, Comprehension and Vocabulary, since we have assumed throughout the most basic implementation of each program, confining our analysis to the first two grades.

The materials resources available for the Ginn program reflect its broad orientation, for they are numerous and varied. The materials, however, are divided into those which are considered essential ("Program Components") and those which are useful, but not necessary for carrying out the program ("Other Materials Available"). In conducting our analysis of the core strands of Ginn, we examined all the materials considered essential and also several components from the "Other Materials Available" category which seemed relevant to core strategies. Appendix A contains a complete listing of the available Ginn materials. The materials that were included in this analysis are noted.

Palo Alto provides a distinct contrast to Ginn's broad based program. Although no definition is explicitly stated as such, the program claims to adhere to a more restricted, two-part definition of reading. Reading is decoding, i.e., the translation of graphic symbols into a language the reader already knows - oral language. Reading is also the getting of meaning when the reader deals with words in sentences, and the structures that bear meaning in discourse. Viewed in the current array of definitions of reading, Palo Alto has a "linguistic" orientation. Hence, the major job of the program is the teaching of letter-sound relationships, relationships that enable the translation from print to (implicit) speech. This means that the program contains little in the way of activities to extend or further develop knowledge of language and life, except perhaps, as they might be needed for a specific task. Rather, the focus in the Palo Alto program is on deriving speech from print and on practicing the handling of information that is already there. The scope of content taught in Palo Alto is

roughly equivalent to the stripped down "core" version of Ginn, but Ginn intends to do much more in the long run, through its Application/Enrichment strands.

The Palo Alto program spans kindergarten through third grade. Its narrower definition of reading is reflected in fewer available materials resources compared to the variety offered by the Ginn program. Most of Palo Alto's materials resources are required for everyday use; thus we have included nearly all of the Palo Alto materials in our analysis. Appendix A contains a complete listing of the Palo Alto materials; resources not included in this analysis are also noted.

Relationships between Largest Program Content Units and School Grades.

The largest unit of content in the Ginn program is called a Level, with 13 levels available to provide instruction through the sixth grade. The largest unit of content in the Palo Alto program is called a Book, with 21 Books available to provide instruction through the third grade.

In order to make a variety of comparisons between the two programs, it was first necessary to determine the relationship among Ginn Levels, Palo Alto Books, and school grades. Establishing this relationship permits us to compare programs at the same developmental level and answer questions such as...."In the middle of first grade, what Book of Palo Alto would students be using? What Level of Ginn would students be in?" Appendix B contains a description of the method for determining the relationships. The procedures in Appendix B were an approximate means of relating content units so comparisons could be made. Another time and for other purposes, one might want more precision in establishing the relationship between content units of different programs.

Figure 1 illustrates the apportioning of the major content units of both programs accoding to their projected use in the first two school grades. The top portion of Figure 1 shows that four Ginn Levels, Levels 2,3,4 and 5, will probably be covered in first grade, while two Levels, 6 and 7, are covered in second grade. The allocation of unequal units of time to cover different Levels reflects the fact that the Ginn Levels are of different lengths. Palo Alto, on the other hand, was easily translated into approximate amount of time needed to complete each Book, for its individual Books are nearly equal in length. In our subsequent discussions we have used the relationships in Figure 1 as a guide to enable certain comparative statements.

Insert Figure 1 About Here

Some Brief Remarks about Readiness.

We have focused our program analysis on the first two grades and excluded the "readiness" components of both programs. We did, however, take a brief look at these components and would like to report a few observations about new trends, a problem or two related to theoretical directions in readiness (see Venezky, 1975), and some of the old questions that are of continuing concern.

Ginn's Level 1 can be considered its "readiness" component, and Palo Alto's Beginning Level, its readiness component. Both programs state that these Levels can be used in kindergarten or at the beginning of first grade, and that the placement decision should be made

by individual schools, according to their attitudes and philosophy. However, implied in both programs is the notion that these first materials be used in kindergarten. For example, Ginn states, "If Level 1 is taught in kirdergarten, a leisurely pace can be followed. If Level 1 is taught in the first year of the primary division, care should be taken to move the program along for capable students." (Ginn, Level 1, p. T-32)

The scope of the "readiness" components of each program is different. Roughly speaking, Palo Alto's readiness program is one-fourth the size of Ginn's and there are differences in the content: Ginn includes correspondence instruction, while Palo Alto does not. To determine the point at which "readiness ends and reading instruction begins" we adopted the rule that "readiness ends when the first correspondence or lessons with printed words begin." Using this rule, we considered Palo Alto's Beginning Level to be its readiness component and Ginn's Modules 1 and 2 of its Level 1 to be its readiness component.

We conducted an analysis of the content taught, interpreted as probable learned capabilities, of Modules 1 and 2 of Level 1 of the Ginn program. The results of that analysis showed that Ginn has, in Chall's terms a global readiness program. The Ginn program, with its broad set of goals, year long program, and varied activities comes very close to providing a complete kindergarten curriculum. The only area that has not been included is mathematical concepts. This leads us to question, as others have done whether this broad set of goals should be the responsibility of the reading program.

Two reasons mitigate against it. First, the development of language and cognitive abilities is a long term 12-year responsibility of the schools and as such represents much too ambitious a goal to be assumed by the reading program, one component of the total learning environment. Second, in a recent theoretical analysis of reading readiness, Venezky (1975) has studied the demands made on the capabilities of the child by the instruction in beginning reading. He has argued quite convincingly, we think, that pre-reading skills are primarily attentional/informational and that initial reading does not entail a high cognitive load. Hence, Ginn provides a global form of readiness that is far broader than needed for initial reading instruction defined in narrower terms.

Amount of attention paid by Ginn (measured in number of lessons) to various categories of capabilities is, in decreasing order of emphasis: cognitive abilities (tasks involving classification of size and shape), general oral/aural language ability (tasks involving listening to and discussing stories), auditory-perceptual aspects of language (identifying words that rhyme), and finally, the terminology and conventions of the reading instruction to come (lessons on left to right orientation). This same classification was done for the content taught in the Palo Alto component. It revealed, in decreasing order of emphasis, attention to cognitive abilities, terminology and conventions of reading instruction, auditory-perceptual aspects of language, and finally, general oral/aural language development. Interestingly, both programs agree that cognitive abilities are important

since they are given the greatest emphasis. However, Palo Alto's component is much smaller that Ginn's, so attention to these individual readiness capabilities is much less extensive. Interesting also, as revealed by the relative order of emphasis, is Palo Alto's preference for the more specific readiness skills over general oral/aural development, Ginn's second favored topic.

Venezky's specification of pre-reading skills enables some evaluation of objectives found in "specific" readiness programs, as contained in Palo Alto. Despite the more limited scope of the Palo Alto readiness program, the main emphasis of the program is on cognitive abilities rather than specific prerequisite reading skills. Thus, the readiness components of both programs do not focus primarily on specific prerequisite reading skills. They appear to us to fall short of adequate design in terms of Venezky's specifications.

One final note is in order with respect to the design of Ginn's correspondence lessons (Module 3) within its Level 1 component. There are 40-plus lessons on letter-sound correspondences, each of which, except for the review lesson, introduces a new and different correspondence. These correspondences are retaught in Level 2. If these lessons are to serve as a preview of forthcoming content, then many fewer than the 40-plus would serve this function very well. The structure of these early correspondence lessons is such that the likely learning outcome is a general "sensitivity" to letter-sound relationships rather than any strong operational facility with the correspondences taught. Thus, the 40-plus lessons consume far too much time, with too little payoff. It would probably be best to

make more economical use of instructional time and move the child directly to the beginning of reading instruction.

We shall conclude, therefore, that our program's treatment of readiness has appeared problematic to us, since we find recent theorizing in relation to required pre-reading skills convincing and compatible with our own view that readiness be focused on the skills that are required to learn to read. So treated, we shall return to the main thrust of our analysis - a study of instructional conditions associated with learning to read in the first two grades.

Flow of Instruction in Lessons of Both Programs.

Within the Books and Levels and both programs is the more basic unit of content, the lesson. The flow of instructional events in a typical lesson of the Ginn 720 program is shown in Figure 2. Figure 3 depicts the flow of instruction in the Palo Alto program. These diagrams were developed by studying the Teacher's Manuals of both programs to determine the instructional relationship and temporal order of story reading and "skills" development, the two commonly occurring instructional events in beginning reading.[3]

Insert Figures 2 and 3 About Here

The Boxes in both diagrams represent different phases of instruction in the temporal order encountered in each program. The row entitled Teacher's materials contains Boxes with names of the tools and/or information that teachers use to conduct a specific portion of the lesson. The row entitled Children's materials contains

Boxes with names of the materials each child uses in the course of specific phases of the lesson.

Referring to Box 1, Figure 2, in the Ginn program, a lesson begins with the introduction of the new sight words that are to be encountered in the forthcoming story. Following sight word instruction, the teacher sets a purpose for reading, often by telling children to read to find out why some event in the story took place.[4] Next, children turn to their Readers and the teacher guides the reading and discussion of the story shown as Box 2 of the Figure. Box 3 represents the third phase of the lesson, the Skills Development Activities. Skills Development consists of work in three skills areas: Vocabulary Development, Decoding and Comprehension. Vocabulary Development entails additional practice of sight words encountered in the previous story, some development of word meaning, and some review of "old" sight words. Instruction in Decoding consists of a teacher-led presentation of a phonemic or structural generalization, while Comprehension instruction consists of a teacher-led presentation of a concept considered important to comprehension. After the teacher introduces new content or leads review of the sight words, the children complete Activity pages that provide practice of the newly introduced or reviewed content. Children are then directed to additional practice pages in their workbooks (Box 4).[5] From this outline of the Ginn lesson, it can be seen that the major portion of reading skills development occurs after story reading.

The Palo Alto program, shown in Figure 3, contains similarly

functioning components. However, the instructional relationships between story reading and skills development are quite different when compared to the Ginn program. Boxes 1 and 2 are skills development activities. The larger portion of skills development takes place prior to, rather than after, story reading.

The first event in a typical Palo Alto lesson is a teacher-led introduction to a new correspondence, with built-in review of previous correspondences. An important tool for correspondence learning unique to the Palo Alto Program is the child's Spelling Pocket, a pocket into which each child's own store of individual letter cards can be placed to build words, or to engage in word analysis activities. The second event in instruction (Box 2) consists of the introduction of new sight words, again mixed with a review of content previously taught. In the third event of the lesson, Box 3, the children read the story and the teacher guides the reading and discussion of the story. Then, children complete pages in their workbooks that provide for practice of decoding skills or for the demonstration of story comprehension. From these descriptions of each program, it should be clear that story reading and skills development have very different instructional relationships in the two programs.

The instructional structures of the two programs are different because the program developers hold different views about the primary instructional function of the story. Palo Alto views the story primarily as an occasion for the child to apply learned correspondences to words in connected text. Ginn, on the other hand, views the story

as the tool for enhancing word recognition through the encountering of new and old words in the connected text. In subsequent discussions we will make several points about the manner in which different purposes for the story have influenced the quality of the stories themselves and their functioning in relation to correspondence learning.

Two additional points related to instruction flow must also be made. The first is that we have assumed that teachers will probably follow the temporal order of lesson activities as laid out in the Teacher's Manual and represented in the Figures.[6] The second concerns the time requirements and distribution of the various activities within the reading "day." There is great variation from classroom to classroom and school to school in the scheduling of time for reading instruction, so no standard implementation across time can be assumed. We have, however, estimated that in the early Levels, sight words and story reading in Ginn could be accomplished in one (30 minute) sitting, accompanied at times by some exercises from the Skills Development Modules (Box 3). However, Skills Development exercises could be taught at another time. "Independent" work (Box 4) in both programs takes a neglible amount of time compared to the other activities. The first two activities of Palo Alto require more time than the first two activities in Ginn. They would probably require two to three sittings (60 minutes total). The third activity, story reading, would take one (20 minute) sitting. These estimates are rough; we have not studied actual classroom implementation. It is, however, important to note that the Boxes in Figures 2 and 3 do

not stand for equivalent amounts of lesson time.

In the forthcoming sections of this paper, we will analyze the way in which each program handles the major types of content taught and the major skill objectives typically contained within beginning reading. Succeeding sections are concerned with letter-sound correspondences, relationships between story reading and correspondence learning, sight word instruction and the development of comprehension. In our treatment of each topic we have been concerned both with program content variables, the selection and sequencing of content to be learned and with the quality of instruction as contained within the instructional strategy descriptions of the Teacher's Manuals. Throughout, it will be necessary to refer back to the lesson flow descriptions as they make apparent certain important differences between programs.

Letter-Sound Correspondences.

One of the important differences between Ginn and Palo Alto, to be noted at the outset of our analysis, is in terms of basic units of lesson content. In the Ginn program, the primary content of a lesson is a set of words; in Palo Alto, the lesson is organized around a letter-sound relationship. However, Ginn also provides instruction in letter-sound relationships as part of its Skills Development component. The programs may be compared in terms of their handling of correspondence instruction.

In one sense, all reading programs "teach" letter-sound relationships, including the older whole-word approaches, to the extent that millions of children who learned to read through the older whole-

word programs sooner or later induced many of the letter-sound generalizations in the language. Of course, the older programs did not make induction easy, for the words they used did not maximize the regularities present in the coding system. Both programs under consideration here provide early and more systematic instruction in letter-sound generalizations, relative to the older programs mentioned above. Thus, both programs have established ordered sequences for introducing letter-sound correspondences.

The considerations involved in sequencing the letter-sound correspondences that are to be taught are both linguistic and pedagogical in nature. They are linguistic because of the alphabetic nature of the English writing system; they are pedagogical because correspondences differ in ease of learning, differ in terms of their productivity and utility (when joined with others) for words that are both meaningful and vivid to children, and, depending upon rates of introduction and relative placements, they quite likely make a difference in the developing child's concept of how the writing system works.

Developers of every beginning reading program are faced with the need to make decisions about sequencing, distribution, and rates of introduction of the correspondences that need to be taught. Although these decisions about program design are not reported explicitly they are, of course, implicit in the developer's product. To discern each program's position with regard to selected factors that appear important in the design of correspondence instruction, we performed several analyses. The purpose of these analyses was to try to define some ways

of looking at the pedagogical factors of correspondence instruction using as raw data two quite different programs.

The first analysis involved identifying the actual correspondences taught by translating each program's conventions for labeling and presenting correspondences into a common form. Then, a sequence chart was constructed for each program. Table 1 contains the correspondence sequence chart for the Ginn program. Table 2 contains the correspondence sequence chart for the Palo Alto program. The entries in the Tables are the graphemic units taught followed by examples of words containing the phonemic elements with which they are related.[7] For example, entry number 43, Table 1, can be read as the correspondence of the letter pattern qu and the sound it makes in queen. The target letter or letters are underlined in the word examples to show position treated in instruction; e.g., entry 88 in Table 1 shows that sk is taught in both initial and final positions.

Insert Tables 1 and 2 About Here

Pacing of Introduction.

One fact to note is that through second grade, each program explicitly teaches approximately the same number of correspondences; there are 93 in Ginn and 91 in Palo Alto. There is, however, a difference between programs in the number of correspondences taught per grade. Ginn covers 52 correspondences in first grade and 41 in second; Palo Alto covers 69 in first grade, leaving 22 for second. Ginn's

correspondence sequence is clearly more evenly divided between grades, while Palo Alto's presents 47 more correspondences in first grade than in second. In the two cases at hand, the number of correspondences introduced in each grade is partly a function of each program's schedule for introducing morphemes. While Ginn distributes its morpheme content fairly evenly across the two grades, Palo Alto prefers to introduce most of its morphemic content later, in second grade. The allocation of grapheme-phoneme correspondences to grades is thus affected. If we had to choose between the two, we would prefer Ginn's distribution of correspondence and morphemic content because morphemes are very important clues to meaning and they should be available to the child early in acquisition of reading. A second reason for the early inclusion of morphemes is their frequent appearance in speech, thereby increasing the similarity of print (i.e., what the child reads) to naturally occurring spoken language. Our view is that, at least in beginning reading, the material the child reads should be as meaningful as possible within the constraints imposed by the need for vocabulary control. Suitable selection and scheduling of early reading content can help make this happen.

Number per Content Unit: Which are Easy, Which are Hard?

Some classes of correspondences are harder to learn than others and require slower-paced introduction and more practice and review. As one reflection of a program's concept of easy vs. hard correspondences, we can look at the number introduced for each major content unit, the Book and the Level. The number of correspondences is not uniformly

distributed across the Books and Levels in either program. A good example can be made in reference to Table 2, the Palo Alto sequence chart. Correspondences 27 through 48 (22 correspondences in total) are initial consonant clusters, and they are taught within a single Palo Alto Book. By contrast, correspondences 70 through 73 (4 correspondences) are also taught in a single Palo Alto Book. These four correspondences are long vowel correspondences. This contrast in number introduced per content unit shows that the developers of the program were sensitive to the relative ease of learning certain correspondences; i.e., Palo Alto reflects a pedagogical view that initial consonant clusters are more readily taught than are long vowels. Carrying this analysis further would enable a judgment of the relative amount of agreement between programs regarding their concept of classes of easy, as opposed to hard to teach correspondences.

The Nature of Correspondence Sequencing.

Referring to Table 2, it can easily be seen that Palo Alto separates "short" and "long" vowels. Note that the short i first appears at position 15, while the long i is introduced at position 74, a wide separation of some 59 correspondences, about a year in terms of instructional time. By contrast, the sequence chart for Ginn shows short i is first introduced at position 18, while long i is introduced at position 28. It should be noted that in Ginn, the short i and long i are not actually separated by the introduction of 9 other correspondences. The content from numerals 18 through 28 is covered in Ginn's Level 3. While the short i and long i (in a VCe) are not presented simultaneously, the instructional sequence does

not start with short i, go through all the consonants listed next to numerals 19 through 27 and then introduce the long i as might be inferred from the Table. Rather, some consonants are taught in parallel with the short i during the first third of Level 3; then, when long i is introduced over the middle third of the level, other consonants are included. Finally, when the long i and short i are contrasted, in the last third of the Level, the consonants are included. Thus, both programs separate the introduction of long and short i, but the Palo Alto program separates them over about a year and the Ginn program over a few weeks.

Throughout the first grade, Palo Alto maintains the one-to-one correspondence; the long sounds of vowels are not introduced until second grade. Ginn, on the other hand, introduces both long and short sounds of i, e, and a in the first grade, a fact apparent from the sequence chart. In relative terms, Palo Alto maintains a rather strong set for regularity with respect to vowel phonemes, while in Ginn the tendency is away from regularity, toward diversity. Interestingly, neither program introduces long and short vowels simultaneously as might be suggested by the results of Levin and Watson (1963).

When considering the questions of a program's status with regard to a set for regularity or a set for diversity,[8] it is important to note that this concept represents a difference in degree, rather than in kind. However, in the case of the Palo Alto program, we probably have found one of the endpoints of the range. As can be seen from the sequence chart, Palo Alto adheres rather strictly to a one-for-one

mapping between vowel sounds and the letters that spell them.

The introduction to the variant spellings of a single phoneme (e.g., out and cow) is yet another facet of correspondence sequencing. Ginn introduces this concept in first grade with examples like knee and seal and hay and cake. Palo Alto, on the other hand, postpones the concept until second grade and only attends to it then with a very weak example (be and see). Palo Alto's one-for-one orientation is once again apparent, this time in relation to variant spellings of a phoneme.

Another important aspect of correspondence sequencing is the introduction of digraphs, i.e., pairs of letters that represent a single phoneme. Ginn introduces examples of both consonant and vowel digraphs in first grade (the ea in seat and the sh in ship). Palo Alto, on the other hand, does not introduce digraphs until second grade.

It is important to note that if the reader neglects to "look ahead" to detect the presence of a digraph (or dipthong) or an ending "e" as in a VCe, s/he cannot correctly decode a word. Introducing digraphs and long and short vowels in close proximity early are two ways to help establish the concept that a target letter must be considered in its environment with other letters before its sound can be determined. Ginn's early introduction (i.e., first grade) of examples of digraphs and long and short vowel sounds may help to develop appropriate "looking ahead" behaviors. We suspect that, on the other hand, Palo Alto's program may result in the child's becoming locked

into "a single letter, single sound" misunderstanding.

Correspondence Selection and Productivity and Utility.

The selection of correspondences that are productive, i.e., those that are contained in many English words is a vital aspect of program design. The learned correspondence should, in conjunction with previously introduced correspondences, be useful for the generation of words that are meaningful to children (the utility of a correspondence). Did the designers of these particular sequences consider productivity and utility? Ginn seems to have considered both. An example is contained within the correspondences taught in Level 3 (numbers 18 through 30, Table 1). At the end of the child's Level 3 reader, there is a listing of 64 words that the developers describe as words that "may be decoded independently by utilizing the skills [correspondences] learned in Level 3" (p. 80, Level 3 Reader). A quick look at these words shows many of them to be strong nouns and verbs whose meanings would be familiar to most children (e.g., bike, pin, kite, sit, rip, hit).

Palo Alto's sequencing appears not to show the same concern for productivity and meaning. For example, when the z is introduced, the only words that are generatable at that point are zig, zag and zip. When the w is introduced, the only words that are generated are wag, wig and win. It seems that Palo Alto's sequencing decisions are not based on a concern for productivity and utility. In the cases of the w and z and a number of other correspondences, the developer's primary

concern seems to be elaborating the concept class of single consonants, in that the 21 consonants are the focal content of a number of consecutive lessons. From the comparisons made here, we can clearly see the influence that correspondences have on the number and meaningfulness of words generatable for later reading.

In summary, we have in this section considered a few important factors in the sequencing of correspondences in reading program design. We have attempted to characterize each program in terms of some of these factors. We have considered only a few selected factors and we are aware that other interesting linguistic and pedagogical issues exist within the area of correspondence sequencing.

Quality of Correspondence Instruction.

Correspondences are part of the subject matter of beginning reading. They are part of the what that is taught, just as addition facts are part of the what that is taught in arithmetic and the names of the city states in Greece are part of the what that is taught in ancient history. As suggested in the previous section, the determination of correspondences taught and the order of their introduction have some implications for the acquisition of decoding skill.

The other part of instruction is how the what (subject matter) is taught. In most beginning reading programs and certainly in the two under consideration, the teacher teaches the new content (e.g., a correspondence, a set of sight words) to the children. The Teacher's Manuals of both programs contain very definite suggestions to the teacher regarding strategies for presenting content. While some teachers

may not follow these suggestions, there is evidence that many teachers rely heavily on the instructional strategies recommended in the manuals (Diedrich, 1973).

To take a detailed look at the instructional strategy suggestions contained in both programs, we searched for identical content that would be taught at approximately the same time in the school year. We found that the short i is introduced near the end of Palo Alto's Book 2 and near the beginning of Ginn's Level 3, approximately the same time in the school year as can be determined from Figure 1. In terms of placement in the correspondence sequence, short i is the 18th correspondence in Ginn (see Table 1) and the 15th correspondence in Palo Alto (see Table 2); approximately the same number of correspondences have been taught prior to the short i in both programs. In addition, the two programs provide about the same amount of instruction in short i, as a count of the number of sentences in the Teacher's Manual of each program revealed (156 in Ginn; 142 in Palo Alto). The results of these analyses enable us to compare the instructional strategies of the two programs, controlling for the lesson content (it is the same short i); for prior content (nearly the same point in the correspondence sequence); and for relative importance given by the program (amount of instruction in the content is nearly the same).

The basic data for the strategy analysis are abridged versions of the instructional strategy descriptions for all lessons concerned with instruction in short i in both programs. The abstracted versions of the strategy descriptions are contained in Appendix C for the Ginn

program, and Appendix D for the Palo Alto program. It is important to note these Appendices, as references are made to them in this text. Referral back to the abstracted strategies is done through a system of notations in which the appendix, objective, main lesson event and secondary lesson event are noted in turn. For example, C.A.3.a refers to Appendix C (the Ginn program), Objective A, main event 3 and secondary event a, the line beginning with "Manual notes: Help children understand. . . ." in Appendix C.

The method for abstracting descriptions involved close reading of each description, identifying important instructional elements and retaining these elements for the shortened descriptions while eliminating other less important discursive content. The instructional elements retained for these abstracted versions of the strategy descriptions were: descriptions relating to the task directions (for example, C.A.1.a), descriptions relating to the stimulus (C.A.1), descriptions relating to the student's response (also contained in C.A.1), descriptions relating to prompts (C.A.4.a), and descriptions relating to consequences and corrections (C.A.2.a). Also included were notations regarding the number and type of repetitions of a lesson event (contained in C.A.1.2).

These abstracted strategy descriptions contain far more data than we are able to analyze here. However, there are a few major points about each program that we wish to make using the data contained in these abstracted strategy descriptions.

The first obvious difference in instruction between the two

programs can be thought of as a difference between analytic and synthetic phonics; Ginn clearly shows a preference for analytic strategies (i.e., exploring a word for its parts), and Palo Alto, a preference for synthetic strategies (i.e., building a word from its part).[9] The strong tendency that each program exhibits toward one kind of phonics accounts in part for the way the target phoneme is to be labeled by the teacher in each program. In Ginn, any time the teacher refers to the sound of the short i, she refers to it as "the vowel sound heard in fish" or she uses some other word that contains a short i phoneme. In Palo Alto, the teacher produces the i phoneme and explicitly tells the children that a certain word "begins with the sound/i/" or that the "middle sound in a particular word is /i/."[10]

The Ginn position regarding the production of phonemes in isolation clearly reflects the admonitions of Bloomfield (1942), Fries (1963), and many others including more recently Gibson and Levin (1975), all of whom question the value, indeed even the possibility, of producing phonemes in isolation. It should be noted that in the Palo Alto program the teacher produces the sound in isolation, but at no point does she request the child to do so.[11]

A second general observation regarding the differences between the two programs is reflected in Ginn's tendency towards helping the children "discover" a particular concept and Palo Alto's explicit statement of that concept. For instance, in Ginn the teacher asks the children "if they see anything about the words (strings of CVC's)

that are the same" (C.C.2.a).[12] On the other hand, the Palo Alto teacher almost invariably tells the child what the particular concept under consideration is (D.A.1.a ; D.E.1.a).

A third general observation about the two sets of lessons under consideration is that much more time is spend in "pure" auditory discrimination (attempting to help the child focus on a target phoneme in spoken words) in the Ginn program than in the Palo Alto program. For instance, four of the ten Ginn lessons (i.e., Lessons A, B, F, and H) are mostly concerned with the child "listening for the i phoneme in words." In the Palo Alto program, listening for the i phoneme appears to have a different purpose than it does in Ginn. In Palo Alto, it is likely that the purpose is to start with what the child already knows, i.e., words and the sounds in words. However, in Ginn the large emphasis on auditory discrimination is likely due to the type of phonics instruction itself, a type of phonics instruction that requires good auditory discrimination abilities. The phonics used in Ginn requires a step in which the child must extract the target phoneme from a spoken word. The large emphasis on "pure" auditory discrimination in Ginn and other similar programs probably represents an attempt to help the child learn to discriminate, for there is much evidence that many five and six year old children have difficulty analyzing spoken words for phonemes and other speech segments (Bruce, 1964; Calfee, Chapman, & Venezky, 1970; Rosner, 1973).

A distinction is required here between activities that are "only" or "pure" auditory and activities that require auditory discrimination,

but are linked with the i letter. For example, activities for locating the position of the i phoneme in words are different in the two programs. Compare Ginn's C.A.7, where the teacher says 9 words (3 begin with i; 6 contain medial i), and children are asked to determine the position of the vowel, to Palo Alto's D.E.2, where the teacher says 13 words, (5 begin with i, 8 contain medial i's), and children demonstrate that they know where the i sound is - at the beginning or in the middle of the word - by placing their i letter cards at the beginning or middle of their Spelling Pockets. Both of the aforementioned tasks require auditory discrimination, but one involves relating the phoneme to the grapheme and the other does not. Ginn has many more "pure" auditory activities such as C.A.4, where the teacher says 9 pairs of words (sit/sat, hop/hit) and the child is asked to repeat the word from each pair that contains the same vowel sound that is heard in fish. In our view, the kind of phonics instruction in Ginn requires very well-developed auditory abilities. In the Ginn program, in order for a child to relate the phoneme with the grapheme, the child has to extract the target phoneme from a spoken word (fish) and hold it in memory long enough to link it to the appropriate grapheme--a very difficult task. On the other hand, the Palo Alto teacher makes the phoneme available and spends more time linking it to the grapheme.

These differences in the how of phonics instruction make important differences for learning to read. First, the phonics instruction in the Ginn program has difficult task requirements; children

who can do what Ginn requires will probably learn to read easily. Second, the auditory discrimination components of Ginn's phonics instruction are probably not, in and of themselves, adequate for developing the auditory abilities of children with poor entering abilities. It is important to note that well-developed abilities are required to profit from Ginn's phonic instruction. Palo Alto's phonics instruction, however, lessens the auditory demand of learning to read because the teacher extracts the phoneme for the child. Furthermore, Palo Alto is more likely to develop auditory abilities through its brand of phonics instruction, for several reasons. First, as was stated, the target phoneme is made available explicitly. Second, it is more frequently associated with its grapheme. Third, through the use of the Spelling Pocket, both the phoneme-grapheme relationship itself and its temporal position in a word are made concrete. The learner has a physical reference for an auditory stimulus. This reference provides memory support and structure as the child's auditory image fades, a practice that supports the development of auditory perceptual skills. The letters used in conjunction with the Spelling Pocket also provide the opportunity to teach auditory skills explicitly, for they are the kind of visual prompts helpful for establishing temporal positions for the sounds in words. Thus, because of the considerations mentioned here, we would suggest that Palo Alto's type of phonics instruction would best meet the needs of the learner with whom we are concerned.

Next, in our analysis of strategy descriptions, we would like

to focus on the graphemic base lessons in Ginn (C, D, E, G, I, and J in Appendix C) and consider two issues: the instructional value of the "CVC" label and the value of the label "unglided vowel sound."

The Ginn lessons suggest that the teacher place the initials "CVC" above a list of words containing the CVC pattern. The value of this practice seems questionable, for several reasons. First, while knowledge of the sound relationships of letter strings larger than graphemes is very important, it is not clear that introducing labels for these units either helps to develop or organize it. We can think of no real reason for teaching the name of the concept; sound-letter patterns can be taught without the use of a label. One defensible reason, within the Ginn program, is that the CVC label is used frequently in subsequent lessons and when CVCe words are introduced later, the label is used. Perhaps the CVC label used frequently will help children learn letter class membership (vowels and consonants). But it seems this is best taught directly within the specific tasks that may require this knowledge (i.e., for syllabication).

In reference to the term "unglided vowel sound," we must again question whether the label will help children learn the correspondence for i. It is again written into the lessons, so that when the long vowel is introduced, it will be called a "glided vowel" and compared to an "unglided vowel." The use of the CVC label and the label "unglided vowel" seem to be unnecessary terminology that is difficult to defend pedagogically. These same considerations apply to the old-fashioned labels "long" and "short" vowel. As Carroll (1964) notes,

"With regard to the actual use of phonics cues, the goal is not to have the learner acquire formally stated rules concerning letter-sound correspondences, but to teach habits of responding to letters and letter-combinations...." (1964, p. 343).

A final consideration in evaluating the quality of correspondence instruction in both programs concerns the varied activities in the Ginn exercises and the repetitive nature of the activities in the Palo Alto program. In Ginn, the variety of activities may indeed overshadow the content. That is, so much is going on that it may be difficult for some children, especially compensatory children, to extract the relevant content. On the other hand, Palo Alto lessons are so predictable that they may be dull. A better mix would be some variations on the major themes in Palo Alto and a little less variation in Ginn.

Opportunities for Application and Maintenance of Learned Correspondences.

In the previous section we compared and contrasted how correspondences are taught in the two programs. Our focus now is on their maintenance and use. It is one thing to be taught the letter-sound relationship for the short i; it is another to apply it to the unlocking of pronunciation for a word. It is yet another to be so familiar with the correspondences that one does not have to stop and overtly apply it. Opportunities to use correspondences recently taught will heighten the chances that later application will become "automatic." Opportunities can be provided in the stories that the child reads. The degree to which these opportunities can be found is a variable that Chall has

called "Opportunities to transfer newly learned correspondences to sentences and story reading."

In an earlier section, we noted that the Palo Alto stories were designed specifically to function as occasions for the application of newly learned correspondences. Due to several factors, the Ginn stories function somewhat differently. First, as noted previously in Figure 2, correspondence instruction in a Ginn lesson occurs after story reading, so there is no opportunity to apply, at least in a forward fashion. Since Ginn distributes its correspondence instruction across a whole Level, one could not reasonably expect the opportunities to come in the very next story, the one that is read directly after the correspondence instruction. It is, however, reasonable to expect these opportunities to appear in stories at the next Level. For this to happen, of course, the correspondences taught at the prior Level must be used in the generation of words for the stories at the next Level. Our concern here was determining the degree to which Ginn provides, as does Palo Alto, opportunities to apply learned correspondences to connected text.

Figure 4 is a visual aid to assist discussion of the relationship between correspondences taught and later story reading in the Ginn program. The top left hand Box in Figure 4, labeled "Level 3 Reader," should be thought to contain all of the words used in the connected text of Level 3. The top right hand Box should be thought to contain all the correspondences taught in Level 3. The lower pair of Boxes in the Figure represent the analogous components for Level 4. The

relationship we were looking for is the relationship between Level 3 correspondences and the Level 4 Reader.

Insert Figure 4 About Here

There are two considerations of textual design that could heighten opportunities to apply letter-sound correspondences. The first is that some new words introduced in Level 4 could be selected so as to be decodable on the basis of correspondences taught in Level 3. This relationship is implied by the diagonal dotted line with the arrow pointing up. Level 4 of Ginn introduces 46 new sight words with seven of those 46 words labeled by the program as "decodable." Only four of those seven decodable words are decodable on the basis of correspondences taught in Level 3. Therefore, the data show that practically no relationship exists along this diagonal line.

The second consideration of design that could heighten opportunity to apply letter-sound correspondences is that the 64 words that are considered decodable at the end of Level 3 and have not yet appeared in stories (see previous section "Correspondence Selection and Productivity and Utility") might well have been used in the Level 4 stories. This relationship is implied by the diagonal dotted line with the arrow pointing down. An examination of these Level 4 stories revealed a number of places where some of the 64 available decodable words could have been used, without changing the theme or story line, but they were not used. The data show that practically no relationship exists along this diagonal line either. Ironically, Ginn suggests that the

64 words may be used by the teacher to develop additional decoding lessons. Why should the teacher develop additional word analysis exercises with a set of words that contains correspondences that have already been taught? Wouldn't it be far better to include a number of those words - words learned through analysis exercises - in connected text. In our opinion, the Ginn program missed a golden opportunity by its failure to include a good portion of the 64 "decodable" words available at the end of Level 3 in the Level 4 stories.

The importance of frequent opportunities to apply learned correspondences should not be underestimated. A newly learned correspondence is a tool for unlocking the pronunciation of a word in order to get to the meaning of the word and thereby the meaning of larger units, sentences and paragraphs. Newly learned correspondences should be encountered frequently in words, and those words should appear in connected text. This condition provides the means for moving the words themselves into the child's recognition vocabulary, (i.e., the store of words that the child recognizes rapidly) as well as enhancing facility with new correspondences.

Since we did not see much connective tissue between correspondences learned and words in the later Ginn stories, we sought to determine whether the correspondences learned in one Level were maintained through subsequent correspondence instruction. To determine this, we reviewed the treatment given Level 3 correspondences during Level 4 correspondence instruction, contained within the Skills Development Module and the child's independent work (Boxes 3 and 4 in Figure 2).

Referring to Figure 4, this relationship is represented by the vertical dotted line. In reviewing the Level 4 content, we found that the major new Level 4 correspondences are the short e and the ee and ea digraphs. As we looked through the teacher-led correspondences exercises in Level 4, and the child's workbook activities, we found little attention paid to the major correspondence taught in the preceding Level, Level 3 (the short and long i). One can reasonably conclude that maintenance of correspondences is at best minimal and that the correspondence "tools" might well get rusty and be of little use when needed.

This connective analysis was not done for the Palo Alto program, for it is clear that there are a great number of opportunities to apply correspondences to connected text. The program was built with that specific purpose in mind. As evidence of this and to provide direct contrast to Ginn, another analysis was conducted. The results of this analysis is contained in Table 3 which shows the percent decodable words children encounter in the stories contained within each Ginn Level and each Palo Alto Book. Percent decodable, the basic data in the Table, was obtained by dividing the total number of words a program considers "decodable" for each content unit, Book or Level, by the total number of new words introduced in that Book or Level. Percent decodable was easily calculated for the Ginn program from its list of words contained with the child's Reader. Palo Alto, on the other hand, does not provide this information in direct form, as does Ginn. In Palo Alto, the basic data had to be collected.

Insert Table 3 About Here

The beginning of each Palo Alto Book contains a list of sight words introduced in the Book, along with a list of words decodable on the basis of prior learnings. These latter words are intermixed with the new decodable words. The new decodable words were isolated from the total set by determining whether they contained a letter that was taught within the Book. Words that did were identified and then counted and a percent decodable derived. The estimate of percent decodable found in Table 3 for the Palo Alto program must be qualified by the fact that, in the later Books, words listed as sight words in early books are retaught within the program as pattern words, thus, they are decodable in the story. This means that our estimate of percent decodable is an underestimate of the actual percent decodable within the Palo Alto program. Despite this, our point can be made using present data. As can be seen from the Table, percent decodable is far lower in the Ginn program than in the Palo Alto program.

The data in Table 3 confirm the separateness of correspondences and text in the Ginn program and the interrelatedness of correspondences and text in the Palo Alto program. We think that the Ginn program could have heightened its percent decodable on the basis of considerations noted previously. It could have more fully implemented its early and more systematic phonics by capitalizing on its chances to increase the opportunities to apply.

Sight Word Instruction.

In the Ginn program, as is the case in similar basal programs, the sight words introduced are selected from high frequency words

and words which are expected to be in the child's experimental and knowledge store. The order of the introduction of words is not constrained by the correspondences that the child has learned. For instance, if the author of a Level 4 story wants to write a story about helicopters and airports, those two words become sight words for the lesson in which the story is used.

On the other hand, in the Palo Alto program where the primary purpose for reading connected text is to apply learned correspondences, the majority of words used in the stories are constrained by the correspondences taught. However, even in the strictest code-emphasis program there are some English words, such as the word one, that must be taught as sight words. As it is, the Palo Alto program introduces a very large number of sight words, for a core-emphasis program. In code-emphasis programs, a word is introduced as a sight word when all the correspondences in that word have not been taught. Since both programs introduce words as sight words, it is interesting to compare them on selected factors concerned with sight word instruction.

The sight word teaching techniques in both programs are quite similar. The teacher displays the printed words using word cards or by writing them on the chalkboard. Then she uses each word in a phrase or sentence. After pairing the printed word with the spoken word, she then asks students to read the words as she points to them and asks children to use them in their own original sentences.

From the Teacher's Manuals, we counted the number of pairings

of the printed word and the spoken word as implied in the instructional strategy description. This was done to determine a program's assumptions about the number of pairings required for establishing recognition. A comparison of ten randomly sampled lessons at each of two Levels of Ginn, Levels 3 and 5, to ten randomly sampled lessons in two Books of Palo Alto, Books 2 and 6, revealed that at least two pairings are the lower bound for each new sight word. Ginn suggests the average be 4.2 pairings for each word (out of a 71 word sample) and Palo Alto suggests the average be 5.6 pairings (out of a 41 word sample). One of the pairings in Palo Alto comes from the reading of the sight words contained on the Practice Page, a page in the child's Reader that precedes a set of stories.

It is interesting to note the techniques used to focus attention on the word to be taught. While the sight word teaching techniques of the two programs are quite similar, the instructional strategy descriptions in the Teacher's Manual are strikingly different. The Palo Alto program provides a quite detailed description of certain aspects of the instructional task. Directions to the teacher about the conduct of the lesson are stated in terms of what the teacher or the children are to <u>say</u> and <u>do</u>. Ginn's descriptions, on the other hand, are more discursive. To take an example from Palo Alto sight word teaching, the program directs the teacher to:

> "Say: I shall say some sentences. What is the word that comes after I in these sentences? I do want to go home early. I do like ice cream. Put the Word Card <u>do</u> in the Pocket Chart, and tell pupils that it stands for the word <u>do</u>. As pupils make up similar

sentences and say them point to do each time."

(From Palo Alto, Book 2, Page 103).

It is hard to know, of course, whether teachers follow these teaching descriptions as stated. The descriptions are of interest for their fine grained lesson programming on selected aspects of an instructional task.

Ginn and Palo Alto handle ntenance of sight words very differently. Ginn claims a schedule of at least three repetitions of each sight word in subsequent stories. Of more interest is the fact that except for important function words, Palo Alto does not claim to maintain sight words, nor does it expect mastery of sight words after they have been introduced. Rather, sight words are re-analyzed for the correspondences they contain at a point in the program where all these correspondences have been taught.

Palo Alto introduces a very large number of sight words for a code-emphasis program. Through second grade, 534 sight words are introduced, compared to 613 introduced in Ginn. To a large extent, except for important verbs and other function words, Palo Alto introduces sight words before a story, uses them in the story and does not maintain them as sight words. Had the program chosen to include fewer sight words and to select them more carefully from function words, irregular words, and strong story words, the words could have been easily maintained in subsequent lessons. With a total of 613 sight words, more suitably chosen for strength and

meaningfulness, Ginn was able to produce far more interesting stories having more natural syntax than was Palo Alto with its comparably large number of sight words and its hundreds of additional words generated as subsequent correspondences were introduced. Our claim that Ginn's words are stronger and more useful for generating stories is based on a general sense of the words selected. It was not captured well by several analyses of the story words that we have conducted, but we do not report here. One analysis did reflect differences in the story words and it is reported in the next section.

The Development of Comprehension.

Comprehension is developed in both programs through activities associated with story reading and through direct instruction in specific comprehension abilities (inferring main ideas from details, understanding cause and effect, distinguishing fact from fantasy, and so forth). Comprehension of stories is shaped by events that occur prior to reading, during reading and after reading.

Referring back to the lesson flow diagrams, Figures 2 and 3, it can be seen that some events prior to reading (Box 1 in Ginn, Boxes 1 and 2 in Palo Alto) are common to the two programs, but that there are some differences. "New" sight words are taught in both and they each provide some pre-teaching or discussion of concepts on which comprehension of the story depends.[14] Palo Alto, however, provides more extensive and yet quite specific, preparation for reading through its review of words, word groups and patterns that

are to be encountered in the story. Palo Alto's assumption is that in order for decoding skills to be applied to connected text, content previously taught must be reviewed immediately prior to the story, presumably to enhance its availability. Students in the two programs are entering the story with differently primed skills - of pedagogical interest is the influence these different "readiness" states have on the development of comprehension of connected text.

Events shaping story comprehension during and after reading (Box 2 in the Ginn flow; Boxes 3 and 4 of Palo Alto) are also somewhat different in the two programs. A major difference is contained in the form of the teacher directions and questions about the story information, recommended in the instructional strategy descriptions of the Teacher's Manual of each program.[15] An analysis of the suggested lesson strategies for the first five stories of Book 2 of Palo Alto and Level 3 of Ginn showed that after story reading, Palo Alto directs teachers to tell children to locate information in the text that contains an assertion ("Find the sentence that tells...") or supports a conclusion ("What in the story makes you think that...?"). By contrast, Ginn, to a large degree, suggests teachers use more natural question forms, like Wh questions ("What is Bill doing?; Where do you think the ducks come from?"). We think that the form of questioning may be an important pedagogical difference between programs. "Correct" answers to comprehension questions are bound to the information that is present in the story. At the time the question is asked, this information must be recalled

and used in the formulation of an answer. The Palo Alto program, by virtue of its type of question format, directs the child back into the text as a regularly occurring event after reading. This may mean that children might develop a set to return to, or recall, information given in the story as a first step in answering questions about it. If such a set does indeed develop, it can both help and interfere with the development of comprehension, depending upon how relevant the question is to the information in the text.

Ginn's more generally framed Wh questions seem less likely to develop the above set, but there are disadvantages to exclusive reliance on Wh questions anaccompanied by occasional directives back into the text, to locate information that contains an assertion or supports a conclusion. Also, the two types of post reading activities ("Find...." vs. Wh questions) differ in other ways, e.g., response mode, and these additional differences may influence the comprehension processes developed.

An analysis was performed to check on the extent to which the Ginn program makes explicit the role the information contained in the story plays as a basis for answering questions. This analysis consisted of counting the number of "challenge" questions ("Prove your answer; Tell me how you know," etc.) in the first five stories of Level 3. There was a total of 27 comprehension questions, and four "challenge" questions, indicating Ginn does attend to this important factor. However, revealing the information basis for the answer to a question is only one step in the question answering

process. There are other steps, consisting of the linking of stated information to other information in the child's knowledge store through various kinds of language and reasoning processes. In addition to asking challenge questions, the teacher should take more steps to bring out and describe some of the basic concepts and find ways of relating those concepts on which correct answers to questions depend. This information must be made external before it can be learned and not all children, particularly those in our target population, already possess it. In other words, what we are suggesting here is that comprehension (i.e., question answering) be explicitly taught, rather than left to the child to induce as he tries answers and gets corrective feedback.

Content of Stories in the Programs.

We have mentioned previously various aspects of a program's design and intent that influence the selection and construction of words used in the stories. These words, in turn, influence the semantic content and phonological characteristics of the sentences. We have, here and there, noted that Ginn's stories seem more vivid and meaningful than Palo Alto's, but, after several kinds of analyses we failed to show real differences between stories on the variables selected for test. We are able to show differences between stories here. We sampled every word from every tenth sentence at comparable developmental levels of Ginn and Palo Alto - Levels 3 and 5 in Ginn and Books 2 and 6 in Palo Alto. Then we classified these words according to syllabic composition. Table 4 below shows the results of this analysis.

Insert Table 4 About Here

The results are clearly, strikingly different. The percent polysyllabic in Ginn is much greater than at comparable Books in Palo Alto. Palo Alto reflects excessive use of single syllables, typical of "linguistic" programs. The phonological characteristics of what children read are clearly different in the two programs with the result, we think, that there is a more severe departure from natural patterns of spoken language in the Palo Alto program. This is again another important pedagogical factor to consider in the development of comprehension, in that it may well interfere with it.

While we did not systematically analyze the content of the stories, that is, the topics and concepts children read about, a quick look shows that Ginn covers a wide range, from realistic child-centered stories with characters who represent various racial backgrounds through fantasy stories. Palo Alto stories seem to be child-centered with some nature concepts included--a much more restricted range. There are a few characters whose race is other than Caucasian, but our sense was that in general, the characters are primarily middle class and white. In all respects, Ginn seems to show more interesting, varied, and higher quality stories than Palo Alto, and provides a better picture of our pluralistic society. From the content of the stories which influence a large portion of

the language communication in a reading classroom, one could easily visualize a Ginn classroom as a far more literate environment than a Palo Alto classroom.

Specific Comprehension Abilities.

Besides reading stories and answering questions about them, beginning reading programs provide for the development of comprehension through instruction in what might be called specific comprehension abilities. A list of these abilities would include such skills as arranging events in sequence, distinguishing fact from fantasy, separating main ideas from supporting details, and so forth. These specific comprehension capabilities are listed in the skills charts of both programs, indicating each program contains activities to develop them.

An attempt was made to compare the instructional procedures recommended by both programs to develop these specific comprehension abilities. Within the Ginn program the instruction and associated workbook activities are clearly labeled and are easily located within the program's Skills Development strand. This is not true of the Palo Alto program. The program does not list specific pages of the Teacher's Manuals where instruction in specific comprehension skills can be found. The program lists the Books in which the instruction can be found. Furthermore, the instruction is not easily located within a given Book for it is not labeled by the name of the specific comprehension ability; the instruction is labeled by other names. For example, in the class of Fact vs. Fantasy, a listed topic is

entitled "What is it? What can it do?..." (Book 5, page 108). Finally, while the comprehension pages in the student's Workpad that accompanies the teacher-led lesson are clearly labeled, as comprehension pages, the descriptions used often refer to the types of response formats (e.g., comprehension through answering questions and writing an original sentence) rather than the comprehension capabilities the instruction is supposed to develop. Because the two programs are organized and labeled so differently, it was not possible within the time period for this paper, to develop methods for analyzing and relating them.

A quick overview of the comprehension activities in both programs revealed some similarities in the types of exercises children are asked to do, even though these exercises are described by different category names. There appears to be some degree of difference in the relatedness of the specific comprehension activity to the content of the story - in the Palo Alto program, the teacher uses the story to develop skills like retelling events in sequence (Book 2, pp. 117, 118). By contrast, because of its modular design, the Ginn program develops specific comprehension skills by frequently using text specifically written for the ability to be developed. These observations, however, are only general impressions and require more systematic analyses for verification.

Our analysis of the development of comprehension as found in two beginning reading programs has, of necessity, been brief. We do, however, have some general notions about factors to consider in a more complete analysis. First, to analyze comprehension instruction, one has to look at the sequence of actual comprehension tasks children are

asked to perform. The properties of these tasks then must be described, taking into account important variations in the nature of the stimuli presented, the nature of the learning directions, and the nature of the responses requested. Neither program reviewed here provides a satisfactory system of comprehension task descriptions at a level of analysis that would provide insight into the development of comprehension. Ginn merely labels its comprehension instruction according to the ability that's supposed to be learned; Palo Alto describes comprehension instruction in terms of test performances or response classes (e.g., comprehension through matching sentences and pictures). Neither program provides adequate descriptions of the instructional events associated with story comprehension; for example, the post questions have not been analyzed or described in terms of their linguistic structure or semantic relationship to the text. Neither program fully describes the cognitive and conceptual content of the comprehension instruction. Better descriptions are required both for understanding what is taught and for doing more specifically focused teaching; quite important for the children we have in mind.

The problem of developing an adequate scheme of comprehension task description is a difficult one. To characterize the comprehension of connected text requires a description of the content of the text with attention to semantic content and linguistic structure, a description of the learning directions (i.e., the purposes the teacher sets for reading), and a description of the response classes (i.e., what the reader is asked to do after reading - answer certain kinds of

questions, retell a story in his own words, etc.). Care must be taken in the planning of comprehension task descriptions to reflect as much of the important variation as exists in task and content dimensions, while still retaining qualitatively similar classes of tasks. To identify sources of variation in certain task dimensions, one could look to linguistic and psychological research to find out how a certain task dimension has been operationalized. For example, one could look at Kintsch's work on semantic content description to describe the content of connected text; one could look at R.C. Anderson's work to analyze and describe classes of questions and their relationships to the story text; and to L.T. Frase's work to identify variations in learning directions, and so forth. Developing a system of comprehension task descriptions on the basis of variables created by research would have two advantages: it would lead to a more refined system of task description than we have at present and it would tie instruction to research evidence, leading to the development of an understanding of or some hypotheses about what our existing comprehension instruction seems to be developing.

Of course, the development of a more adequate system of task description is only one component of an analysis of comprehension instruction. To be able to evaluate the quality of the instruction, the instructional strategies must be analyzed, with the capabilities of the learner in mind, as we have done with phonics instruction in this paper. The situation is much more complex with comprehension

instruction, however, since it is not clear that learning outcomes have, to date, been adequately specified. Nevertheless, future work attempting to systematically describe current practices in comprehension instruction would provide a useful baseline description of what currently exists for the making of informed recommendations for change.

Summary and Conclusions.

In this paper, we have analyzed certain aspects of the instruction provided by two beginning reading programs in several areas of instructional concern - correspondences and phonics instruction, sight word learning, and the development of comprehension. To compare programs, we focused on pedagogical aspects and attempted to describe programs in those terms. Where our knowledge of theory and data, or our experiences permitted, we were able to make some evaluative statements in relation to both programs. We made these statements having in mind the child who has difficulty learning to read.

With regard to the programs studied here, our early thoughts that desirable conditions for learning to read would reflect a synthesis of the positive aspects of both programs were indeed correct. Overall, we have preferred Ginn's correspondence sequencing, its corpus of sight words, and its stories. By introducing a relatively even amount of correspondences and morphemes across the two grades, Ginn's program increases the probability that the language in the stories will resemble naturally occuring, spoken language. Ginn's early introduction of digraphs and its teaching of long and short vowel sounds in close proximity

teaches the beginning reader to consider the target letter in its environment, precluding the "one letter, one sound" misunderstanding. Correspondence sequencing that introduces morphemes, digraphs, etc. early, allows for the generation of strong nouns and verbs that are likely to be both familiar and productive to the child. Ginn's sight words and polysyllabic words, chosen for their strength and utility, produce a wide variety of stories and a more natural syntax.

Palo Alto provides better designed phonics instruction and more opportunities to apply learned correspondences to connected text. Its program lessens the auditory demands on the child by having the teacher extract the phoneme and produce it in isolation, and by frequently associating the phoneme with its grapheme. The child, through use of the Spelling Pocket, is given a memory support for an auditory image as that image fades. Palo Alto, too, avoids labeling concepts--a practice that adds unnecessarily to the learning load in Ginn's materials. The order of lesson flow in Palo Alto's program, provides the child with an immediate opportunity to apply learned correspondences to a related text. The interrelatedness of correspondences and text raises the percentage of decodable words and moves the words into the child's recognition vocabulary. In our discussions of reading program design, we were able to show, through specific examples, the aspects of design that could have been better handled. Because of this, we have shown on an operational, rather than on a discursive level, how better "balance" in a reading program might be achieved.

In the body of this paper we discussed at some length the nature of phonics instruction found in these two programs. Concerning phonics, two points merit being made here. Both programs teach correspondences in the "backward" direction - they go from sound to letter (a spelling requirement) rather than from letter to sound (a reading requirement). Neither program requires the child to produce the sounds in isolation. The theoretical issues associated with these practices are complex, the evidence incomplete, and it is not within the scope of this paper to provide a full discussion here. Nevertheless, it is our continuing belief that successful practices built on sound rationales provide a framework for evaluating and questioning certain other practices and prescriptive positions. It is our belief that from letter-to-sound is the right direction to teach reading for it goes in the same direction as the terminal behavior, thereby removing the burden from the child to reverse the process. It is also our experience that with a good training model for blending, built on a firm rationale, a limited amount of sounds in isolation in teaching beginning reading is not harmful, but facilitating, especially for our target population. These beliefs, we think, should be integrated into any final statments on the advisability of certain practices in phonics.[16]

With regard to methods for analyzing reading programs, our approach emphasizes our belief that analysis should be done by considering aspects of program design that can facilitate or impede learning as a framework for judging programs' strengths and weaknesses. In our paper we have given a brief outline of some of what we consider to be major instruc-

tional factors to be attended to in any program analysis. For a large scale analysis, one would expand the set of factors considered and refine the data gathering and handling techniques. Other important aspects of program analysis that we did not consider here include the relative role of individualization, materials organization, congruency of lessons and tests and the soundness of remediation techniques for particular kinds of learnings. Program analysis, however, should not be the only consideration in studying how children are taught to read. The program itself is only one of many factors that influence how the child is being taught and the quality of the instruction received.

As a final note, we wish to add that because we believe program design is both a science and an art, the program analyst must go beyond the things that are easily counted and measured. A reading program is more than the sum of its parts and the analyst must attempt to capture a program's intuitive bases and its appeal to the developing child.

Figure Captions

Figure 1. The relationship among Ginn Levels, Palo Alto Books, and the first two school grades.

Figure 2. General flow of a typical lesson in the Ginn program.

Figure 3. General flow of a typical lesson in the Palo Alto program.

Figure 4. Relationship between letter-sound correspondences and connected text in the Ginn program.

Footnotes

[1]Ginn states in an undated document entitled Reading 720 Materials and Learner Verification Statement.... "Reading 360 has been used since 1969 in about 2000 school districts. Over 15,000,000 pupils are estimated to have encountered Reading 360 as part or all of their reading program."

[2]To avoid confusion between program labels for content components and the constructs of reading theory, we will adopt the convention of capitalizing program component names.

[3]Ginn divides a lesson into four clearly stated steps: Preparation for reading, Reading and Discussing the selection, Interrelated Activities (Language Extension and Creativity), and Developing Reading Skills. By contrast, the Palo Alto program is not organized into clearly stated steps. Its objectives are often not stated and are frequently contained within descriptions of the lesson procedures themselves. Thus, we had to read through many lessons to induce Palo Alto's basic procedures and then form categories of major lesson events before meaningful comparisons could be made with Ginn.

[4]Ginn refers to words that are taught as whole units as "basic words;" Palo Alto refers to them as "configuration words." In this paper, we have chosen to refer to words that are taught as whole units as "sight words." Our term "sight words" encompasses both Ginn's "basic words" and Palo Alto's "configuration words."

[5]In the two reading programs, there are a number of different ways that the consumable printed pages that students mark are described. Palo Alto refers to these books as "workpads" and the pages contained in the books as "workpad pages." Ginn calls the books "Studybooks" and the pages contained in them "studybook pages." In this paper, we have elected to call the books that students write in "workbooks," and the pages within these books are "worksheets" or "workpages."

[6]Ginn's modular structure permits the teacher greater freedom in sequencing and combining lesson activities. For example, Skills Development need not follow story reading; it can be taught at another time. Palo Alto, on the other hand, is definitely not modular in design. All lesson activities are intermixed and purposefully designed to be quite interdependent.

[7]In Tables 1 and 2 we did not include the sequence of morphemes. However, we will make some comments in the text regarding the difference between morpheme distribution and sequencing in the two programs.

[8]A set for regularity implies that a one-to-one correspondence between a grapheme and a phoneme (e.g., the short a phoneme for the a grapheme) is established and kept that way for a long time, often many months, before another phoneme that can be represented by the original grapheme is introduced (e.g., the "long" sound of the grapheme a). A set for diversity suggests that multiple phonemes for the same grapheme, e.g., the short sound of a and the long sound of a are introduced in close proximity to each other.

[9]Ginn shows one instance of synthetic strategies (C.G.1), whereas Palo Alto shows a number of instances of analytic strategies, (e.g., D.E.6.b. D.E.6.d, D.E.7.b, D.E.7.d, D.E.9.b). Subsequent Ginn exercises show more instances of the kind of word building exemplified in C.G.1. The activity in C.G.1 is known as "initial consonant substitution."

[10]The notation /i/ is used here to stand for the phoneme itself.

[11]Bloomfield, Fries, Gibson and Levin argue against the child's producing isolated phonemes. We have not in their writings detected any direct statement against the teacher's producing phonemes, though given their theoretical positions we would assume that they would not recommend it.

[12]Two points regarding the notion of discovery in Ginn lessons should be explicated. The first is that the "discovery" tendency in Ginn comes through more strongly in the actual lessons than in the annotated version in Appendix C. The other point is that Ginn does not confine their approach to a discovery method; indeed, Ginn does include a lot of "pointing out" and "telling" by the teacher.

[13]Our definition of decoding is the translation of print into meaningful speech. One is decoding when one recognizes words rapidly or when one sounds those words out. Ginn uses the term "decodable" to mean that all the correspondences in a word are known. We have adopted the term "decodable" as Ginn uses it, as it was awkward not to. However, we are disturbed enough by the incorrect use of the word decodable that we often add after the term "decodable" the statement that it means all the correspondences are known.

[14]Ginn's "Setting a Purpose for Reading" contained within Box 1 offers suggestions to the teacher for concept review and development prior to the story. Palo Alto provides for pre-teaching the meaning of selected vocabulary words (see Box 2) to be encountered in the story.

[15]Ginn notes that the questions and suggestions contained in the Guided Reading Section of its Teacher's Manual are optional and need not be followed. We have assumed they will be used here.

[16]See Resnick and Beck (1975) for a description of a training model for blending and its rationale.

References

Bliesmer, E. P., & Yarborough, B. H. A comparison of ten different beginning reading programs in first grade. Phi Delta Kappan, 1965, 46, 500-504.

Bloomfield, L. Linguistics and reading. Elementary English Review, 1942, 19, 125-130

Bruce, D. J. Analysis of word sounds by young children. British Journal of Educational Psychology, 1964, 34, 158-169.

Calfee, R. C., Chapman, R. S., & Venezky, R. L. How a child needs to think to learn to read. In L. W. Gregg (Ed.), Cognition in learning and memory. New York: John Wiley, 1972.

Carroll, J. B. The analysis of reading instruction: Perspectives from psychology and linguistics. In E. R. Hilgard (Ed.), Theories of Learning and Instruction - The Sixty-third Yearbook of the National Society for the Study of Education, Part 1. Chicago: University of Chicago Press, 1964.

Diederich, P. B. Educating those who teach reading. Princeton: ERIC Clearinghouse on Tests, Measurement and Evaluation, Educational Testing Service TM Report 23, 1973.

Fries, C. C. Linguistics and Reading. New York: Holt, Rinehart and Winston, 1962.

Gibson, E. J., & Levin, H. The Psychology of Reading. Cambridge: MIT Press, 1975.

Levin, H., & Watson, J. The learning of variable grapheme-to-phoneme correspondences. In a basic research program on reading. Final report, Project No. 639, Cornell University of U. S. Office of Education, 1963.

Popp, H. M. Current practices in the teaching of beginning reading. In Carroll, J. B., & Chall, J. S. (Eds.), Toward a literate society (The report of the committee on reading of the National Academy of Education). New York: McGraw-Hill Book Company, 1975.

Resnick, L. B., & Beck, I. L. Designing instruction in reading: Interaction of theory and practice. In J. T. Guthrie (Ed.), Aspects of reading acquisition. Baltimore: Johns Hopkins University Press, in press.

Rosner, J. Language arts and arithmetic achievement and specifically related perceptual skills. American Educational Research Journal, 1973, 10, 59-68.

Venezky, R. L. Prereading skills: theoretical foundations and practical applications. Madison: Wisconsin Research and Development Center for Cognitive Learning, Theoretical Paper No. 54, 1975.

Instructional Materials

Reading 720. Clymer, T., Christenson, B., & Brown, V. Lexington, Mass.: Ginn and Company, 1976

The Palo Alto Reading Program (2nd Ed.): Sequential Steps in Reading. Glim, T. E. New York: Harcourt Brace Jovanovich, Inc., 1973.

APPENDIX A

A Complete List of Materials Resources Available from Ginn and Palo Alto Specifying those that were used in this Analysis.

Materials Resources: Ginn.

Ginn lists its materials resources under two headings: Program Components which are essential for the conduct of the program, and Other Available Materials which are useful but not essential. The resources provided in each category appear below:

Program Components	Other Available Materials
*Kit of Manipulatives to Teach Level 1	*Skilpaks
*Teacher's Editions	*Evaluation Materials
*Pupil's Texts	Picture Maps
*Workbooks	*Basic Card Set I
	*Basic Card Set II
	Decoding Sound Filmstrips
	Readalong Recordings
	Resource Activity Book
	**Magic Circle Book
	Decoding Activity Charts
	Supplementary Materials Bibliography

All materials noted with one star (*) were examined at the time the analysis of this paper was being done.

In another setting, we have seen the Magic Circle (**above) which are nicely produced books that also appear to be well written.

APPENDIX A (cont'd)

Although we would have preferred to include the Decoding Sound Filmstrip and the Resource Activity Book in our inspection, we felt that we could limit our analysis to the starred components above since they are clearly the most essential materials; the non-starred components listed in the Other Materials Category are viewed as enriching and supplementary rather than as essential and integral. Indeed, from our experience we know that when a publishing house divides materials into essential and supplementary categories, schools often opt to purchase only the essential materials.

Palo Alto

Palo Alto's publisher does not specifically state which resources are essential and which are supplemental. Most of the materials are directly related to the decoding and meaning components of the program. The materials resources provided in the Palo Alto program are summarized as follows: Teacher's Guides, Pupil's Books, Workbooks, Pocket Chart and Cards, Skills Practice Kits, Tests, and Wall Charts. All of the material except the Skills Practice Kits were examined at the time the analysis for this paper was being done.

APPENDIX B

Procedures used to Transform Content Units to Relative Proportion of Time Spent in those Units for the First Two Grades.

The scope of our analysis involves the time span from first through second grade. Thus, we determined on the basis of information provided by the publishers, the grade coverage of Levels and Books. Ginn suggests that the majority of first graders will start with Level 2 and complete Level 5 by the end of first grade. Some children are expected to complete Level 6. Considering our target population, however, we used the more conservative estimate of coverage, Level 5.

Level 1 is Ginn's "readiness" component. It contains content designed for use in either kindergarten or the first year of instruction, and any letter/sound correspondences introduced in Level 1 are reviewed in Level 2. Since excluding Level 1 from our analysis omitted no important first grade content, we have agreed with the publisher that Levels 2 through 5 are representative of first grade content. Levels 6 and 7, and perhaps 8 will, according to Ginn, be completed within the second grade.

Within first grade, the four Levels of Ginn are not of uniform length. To determine the relative proportion of time spent in each Level during first grade, we counted the number of pages contained in the basic materials resources as a measure of content taught, our estimate of time spent in instruction. Table B.1 shown below shows these data.

APPENDIX B (cont'd)

Table B.1

Total Number of Pages Contained in the Teacher's Manual, Child's Reader and Studybook in Levels 2, 3, 4 and 5 of the Ginn Program.

	Levels of the Ginn Program			
Resources	Level 2	Level 3	Level 4	Level 5
Teacher's Manual	194	131	131	242
Reader	-	72	72	203
Studybook	92	47	47	95
Total Number of Pages	286	250	250	540

As can be seen from the Table, the total number of pages in the Level 5 resources is approximately twice the number contained in each of Levels 2, 3 and 4. Hence, Level 5 covers approximately twice as much content as Levels 2, 3, 4. Levels 6 and 7, covered in second grade, were the same length. The translation of Ginn Levels to proportion of instructional time in grades one and two can be seen in the top portion of Figure 1 in the text.

As with Ginn, the content of Palo Alto's readiness component is covered elsewhere within the program, so it was excluded from Figure 1. The publisher reports that an approximate first grade coverage in the Palo Alto program is Books 1-6. These Books are nearly equivalent in length, hence represent equivalent proportions of first grade instructional time as shown in the top portion of Figure 1 in the text. With reference to Book coverage in second grade, the publisher expects

APPENDIX B (cont'd)

Books 7-13 to be completed. Considering our target population and our sense of their likely rates of progress through the Palo Alto Books, and in light of our conservative estimate of completion in the Ginn program, we felt Books 7-12 were a more realistic estimate of content covered in second grade. Because these Books are of equal length, they represent equivalent proportions of time in second grade, and are so shown in Figure 1 in the text.

APPENDIX C

An Abstracted Version of the Ten Short i Exercises in Level 3 of Ginn.

This appendix contains an abstracted version of the ten short i exercises contained in Ginn's Level 3. The demarcation of the exercises is indicated by a letter (A through J) with the objective of the exercise quoted next to the letter. In Exercise A, the first short i exercise, each instructional strategy the teacher uses has been abstracted. In subsequent exercises, only those strategies that are new have been listed, with strategies used in preceding exercises referenced back to those exercises.

It is important to point out that the ten short i exercises do not occur one after the other. Rather, they are taught across five lessons so that they are interspersed with five stories and other activities. The ten exercises are sequenced in the Teacher's Manual as follows:[1]

Exercises A and B after Story 1;

Exercise C after Story 2;

Exercises D, E, F after Story 3;

Exercises G and H after Story 4;

Exercises I and J after Story 5.

While we attempted to abstract the material in the Teacher's Manual as much as possible, we were quite concerned that the language of the lesson be apparent to the reader, as that language will be an important part of our discussion concerning the quality of the instruction.

---

[1] "Decoding skills are presented in each lesson plan with the new skill or learning for the lesson appearing first. Reinforcement practice in already-introduced skills follows. The teacher may, depending on the needs of the student and structure of the class, reorder the presentation of these skills" (Ginn Level 3 Teacher's Manual, p. 33).

Following are the abstractions of the ten Ginn short i exercises:

A. "The pupil will identify words containing the unglided (short) vowel sound as in hill. (Introductory Activity)."[2]

1. Teacher shows picture of a fish and a witch and has children name them.

    a. Teacher asks children to "listen for the vowel sound in the middle of fish and witch."

2. Above procedure repeated with crib. (e.g. Children see picture, name corresponding word; teacher asks children if "they can hear the same vowel sound in the middle of crib that they hear in middle of fish and witch.")

    a. Manual notes: "Confirm, by having all three words repeated in unison."

3. Above words (fish, crib, witch) listed on board and read. Teacher underlines i in fish.

    a. Manual notes: "Help children understand that this (underlined letter) is a symbol for the vowel sound heard in the word fish."

    b. Volunteers "underline the same letter in the other words" (crib and witch).

    c. The three words are read.

4. Teacher says nine pairs of words (e.g. sit/sat, hop/hit). Children repeat the word from each pair that "contains the same vowel sound that is heard in fish."

    a. Manual notes: "Because some children may have difficulty identifying medial vowel sounds it may be helpful to read quite deliberately".

5. Teacher writes word Bill (known sight word) on board.

    a. Manual notes: "Help children locate the vowel sound in middle of...Bill, by sweeping your hand from left to right below the word as you read it," and to "call attention to the middle position of the vowel letter i."

6. Teacher says is (known sight word) and asks children if they can hear the "same vowel sound as in Bill at the beginning of word is."

---

[2] All the material from pages 65 through 69 is exerpted from the Teacher's Edition for A Duck is a Duck of the Ginn 720 Reading System.

a. Teacher writes is on board.

b. Manual notes: "Adopt the procedure described above [5a] for establishing the initial position of the correspondence."

7. Teacher says nine words (three begin with i, six contain medial i). Children are asked to determine the position of the vowel.

8. On worksheet children write letter i next to pictures whose names "contain the same vowel sound as in fish."

a. Manual notes: "Refer to the vowel sound in the word fish as an unglided vowel sound. The children may make this term part of their speaking vocabulary."

B. "The pupil will identify words containing the unglided (short) vowel sound as in hill. (Practice 1)."

This lesson uses the same instructional strategies described in A and the following new activity:

1. Manual notes: "For further practice in recognizing words containing unglided vowel sound as in hill prepare a word box."

a. A word box contains objects whose names contain the /i/ sound as in hill (e.g. "a baby's bib, a lid to a pan, a paper clip"). These objects are placed in a box. Pupils select an object and name it.

b. Manual notes: "If the pupil is familiar enough with the word, ask the pupil to write it on the chalkboard and circle the letter that represents the vowel sound. Lead to conclude that the words on the chalkboard have the unglided vowel sound as in hill."

C. "The pupil will decode words containing the graphemic base id. (Introductory Activity)."

1. Teacher writes hid on board.

a. Volunteer reads the word.

b. Manual notes: "If help is needed, point to letter i and say, 'It stands for the same vowel sound that is heard in fish'."

2. Teacher writes did, lid, bid and kid in vertical column under hid.

a. Teacher asks children "if they can see anything about the words that is the same."

b. Teacher draws a vertical line separating id from beginning consonants, "when the word part id is noticed."

c. Manual notes: "Help children understand that knowing the graphemic base id can help them read these words."

3. Teacher sketches stick figure on board and writes name Sid beside it. Word Sid is read.

a. Teacher writes four sentences about Sid on board (e.g., Sid hid at the zoo.)

b. Teacher "helps" children read sentences.

4. Children complete sentences on worksheet by choosing the correct word from two id words.

D. "The pupil will decode words with the graphemic base it. (Introductory Activity)."

This lesson uses the same strategies described in C for id.

E. "The pupil will decode words containing the two graphemic bases id and it. (Practice 1)."

1. Teacher writes bit and sit on board.

a. Volunteer reads words and underlines the graphemic base it.

2. Above procedure repeated for did and hid.

3. Teacher writes fit, hit, pit, kid, bid, lid in two columns.

a. Volunteers underline the graphemic base in each list.

4. Teacher writes six id words and four it words on board and reads story that contains these words. (Children are told that the story contained a number of words that end with id or it.)

a. Manual notes: "Reread story slowly, pausing at each italicized word [id, it words] to allow volunteers to locate and read the words on the board..."

5. Additional activity suggested is to:

a. "Suspend a lid inside a large open carton with the open side facing the player.... Each child is given three pingpong balls and throws them at the lid. If the ball strikes the lid, the player scores a point."

b. "Using the words listed on board [in 4], each child who can find and read an it and an id word (e.g., bit/did) should be allowed to hit the lid."

F. "The pupil will identify words containing the unglided vowel sound as in hill. (Practice 2)."

This lesson uses those strategies described in A and B, and the following new activities:

1. Teacher tells children a story, asks them questions about the story, with the direction that the words they use to answer the questions should "contain the unglided vowel sound heard in this."

   a. Teacher reads: "One night a boy and girl went out exploring. Was the boy's name Dick Smith or John Jones? Was the girl's name Mary Jones or Cindy Smith?"

   b. Activity continues as above with four other questions.

G. "The pupils will decode words containing the graphemic base im. (Introductory Activity)."

This lesson uses strategies from C and E and the following new activity:

1. Teacher places graphemic base card im in card holder. Children select one consonant letter card from five cards (d, h, j, k, or t) and place it in front of the im and read the resulting word.

H. "The pupil will identify words containing the unglided short vowel sound as in hill. (Practice 3)."

This lesson uses strategies from A and B.

I. "Phonemic analysis: The pupil will decode words with the CVC pattern and unglided vowel sound as in did. (Introductory Activity)."

1. Teacher writes sit on board. Word is read.

   a. Volunteer is asked to "name the vowel letter in sit."

   b. Manual notes: "Write a V above i in sit and explain that V stands for vowel."

c. Follow a similiar procedure with consonants in sit, completing the pattern CVC above the word sit.

d. Teacher writes fit, pit, lit, below sit. Words are read.

2. Teacher writes did on board.

a. Same procedure described above [in 1] is followed.

3. Same procedure is followed for him [as described above in 1].

4. Teacher draws vertical lines between the first consonant and between the vowel and last consonant for words in each of three lists. Children read the lists of words.

a. Manual notes: "Establish...that each word contains the unglided vowel sound represented by letter i."

b. "Refer to the CVC pattern and explain that...when the vowel letter i is between two consonants letters, the corresponding vowel sound is usually unglided."

J. "The pupil will identify the CVC pattern with i as in did. (Practice 1)

This lesson uses strategies from G and I.

APPENDIX D

An Abstracted Version of the Sequence for Teaching Short *i* in Book 2 of the *Palo Alto Reading Program*.

This appendix contains an abstracted version of the short *i* sequence as it is taught in Book 2 of Palo Alto. The sequence is continuous; it is not broken up into lessons with intervening activities. The material that follows would be done in order, although not necessarily completed on one day of instruction.

We have made a demarcation (as noted by the letters A through E) when the objective of the sequence changes. The objective is quoted after the letter.

Following is the abstraction of the short *i* sequence:

A. "Listening to and saying beginning /i/ sound as in *it*."[1]

1. Teacher tells children to "listen to the sound that begins the words *in*, *imp*, *igloo*."
    a. Teacher tells children "they [above words] all begin with the sound of /i/ as in *it*."
2. On worksheet children draw rings around pictures whose names begin with the /i/ sound as in *it*.

B. "Introducing *i* as seen in print."

1. Teacher places letter *i* card in pocket chart, says words beginning with /i/ sound, discusses shape of *i*.
2. Children say appropriate letter name as teacher holds up letter cards *i*, *l*, *o*, *v*.

---

[1]All the text on pages 70 to 73 is exerpted from the Teachers Guide for Book 2 of the *Palo Alto Reading Program*.

3. Teacher gives children their own i cards and tells them to get their a, t, s, n, o cards. (Every child gets each letter in both upper and lower case after it has been introduced.)

    a. Teacher says a word [e.g., in]. Children locate from the six letter cards the letter with which the word begins. Fourteen words are suggested. (six i words, other eight words begin with sounds represented by the other five letter cards above)

4. On worksheet children draw rings around each i found in rows of single letters and ring the two and three letter words that begin with i.

C. "Introducing the writing of i."

1. Teacher writes i on chalkboard and discusses its shape [e.g., straight line with a little dot on top.]

2. Children practice writing i's on paper.

3. On worksheet children trace broken line i's, then write i under each i found in a row.

D. "Recognizing the writing of Capital I."

(Same procedures described in C above for lower case i are followed for upper case I.)

E. "Listening to and saying the /i/ sound as in sit."

1. Teacher asks children to listen for the middle sound as she says sit, hit, lit, bit.

    a. Teacher tells children that "the sound in the middle is /i/ and is spelled by the letter i."

2. Teacher says a word containing /i/.

    a. Children demonstrate that they know whether the /i/ sound is at the beginning or in the middle of the word by placing their i card at the beginning or middle of their spelling pockets. (Five words begin with i, eight words contain medial i's.)

3. Teacher places letter s and t in pocket chart and puts a between them. Students read sat.
   a. Teacher replaces a with i. Children read sit.
   b. Same procedure as above used with seven other word pairs. (e.g., ham/him, ram/rim)

4. Children place h and m (with a space between the consonants) in their spelling pockets.
   a. Teacher says ham, children place a in pocket.
   b. Teacher says him, children place i in pocket.
   c. Same procedure as above followed for six other a, i contrast pairs. Before each pair teacher tells children which beginning and ending consonants to place in chart. [e.g., b, t, f, ?]

5. Children place am in spelling pockets. Teacher says "I shall dictate some rhyming words. You put the beginning sound for each word in the spelling pocket as I say it." Teacher says ram. Children place r in front of am.
   a. Initial consonant substitution continues for five other words.

6. On a worksheet, children:
   a. Draw a ring around pictures whose names contain the /i/ sound (three medial i words, two distractors).
   b. Ring the word in a pair that has i in medial position (five pairs).
   c. Trace broken line i's.
   d. Write i under words that have i in their medial position (three medial i words, two distractors).

7. On a worksheet evaluation page, "children...discriminate among sounds represented by fifteen letters in beginning, ending, and medial positions" by completing the following activities:
   a. Children name, then copy letters.
   b. Teacher dictates six words and asks pupils to write letter that stands for the beginning sound of each word (one i word).
   c. Teacher dictates six words and children write letter that stands for ending sound of each word (no i words).
   d. Teacher dictates six words and children write letter that stands for middle sound they hear in each word (two i words).

8. Flannel letter patterns im, it, in, ig, id are placed on flannel board. Teacher puts consonant letter cards before pattern and asks children to read words. Twenty-two words suggested. Teacher is instructed to use both upper and lower case consonant letters.

9. Using the practice page in their readers (page preceding a set of stories that lists pattern words, sight words, and phrases that will be encountered in the story) children respond to the following:

   a. Teacher asks children to read various words and word word groups.

   b. Teacher asks how many different words (from a given set of words) end in it?...in im?

   c. Teacher discusses meanings of words children may not know and deals with multiple meanings. (e.g., multiple meanings of bit: "It doesn't hurt a bit. She bit me. Just a little bit, please.")

Table 1

Sequence of Letter/s Sound Correspondences Through Second Grade for Ginn Program. Correspondence Number 53 Marks the Beginning of Second Grade.

1. b ball	24. k fork	47. th thank path	70. ow snow
2. l look	25. g wig	48. th that	71. ai rain
3. r rose	26. m ham	49. sh ship	72. cr crown
4. h hide	27. n pen	50. gr grass	73. ld old
5. j jump	28. i-e ride	51. fr frown	74. er her
6. c cap	29. s us	52. ff stiff	75. ear learn
7. f fox	30. ss glass	53. c city face	76. sl sled
8. y yarn	31. g get	54. oo wood	77. mb lamb
9. n nose	32. z zoo	55. pl plane	78. or corn
10. d doll	33. l tail	56. sm smile	79. or work
11. g go	34. ll pill	57. ch chair peach	80. ow cow
12. t ten	35. ee knee	58. u bug	81. fl flag
13. v vase	36. ea seal	59. o top	82. oa boat
14. m mud	37. e be	60. a call	83. ur fur
15. s soap	38. s his	61. aw jaw	84. ir girl
16. w vagon	39. a apple	62. nd pond	85. ou out
17. p pig	40. tr tree	63. nt mint	86. kn knife
18. i hill	41. ay hay	64. oo moon	87. br brick
19. b tub	42. a-e cake	65. o-e rope	88. sk skate mask
20. p cup	43. qu queen quilt	66. ar car	98. cl cloud
21. t cat	44. x box	67. o go	90. gl glove
22. d bed	45. st stop fast	68. bl block	91. dr drum
23. ck duck	46. wh wheel	69. tch witch	92. g engine page
			93. y penny

Table 2

Sequence of Letter/s Sound Correspondences Through Second Grade for Palo Alto Program. Correspondence Number 70 Marks the Beginning of Second Grade.

1. a at man	24. e get	47. spl split	70. a be
2. m mom	25. x box	48. str strap	71. ee see seen
3. r ran	26. qu queen	49. nd hand	72. a-e made
4. t tan not	27. bl bled	50. st rust	73. e-e eve, Pete
5. s sat	28. cl clam	51. nt plant	74. i-e like
6. n an not	29. fl flat	52. mp camp	75. o-e note
7. l lot	30. gl glad	53. sk desk	76. u-e mule
8. f fat	31. pl plan	54. sp crisp	77. are bare
9. b bat	32. sl slam	55. ld held	78. ore more
10. o not, on	33. br brim	56. lp help	79. sh ship dish
11. h had	34. cr crib	57. lk milk	80. o go
12. g dog	35. dr drag	58. lt belt	81. o do
13. v van	36. fr frog	59. ft raft	82. th this father
14. d dad	37. gr grin	60. pt kept	83. th thin path
15. i it sit	38. tr trot	61. ct fact	84. oo moon
16. z zig	39. sc scab	62. xt next	85. oo book
17. k kit	40. sm smog	63. ll hill	86. wh when
18. w win	41. sn snap	64. ss pass	87. ch chair much
19. p pop	42. sp spin	65. dd add	88. tch catch
20. u up pup	43. st stem	66. ff muff	89. ng sing
21. c cat	44. sw swim	67. gg egg	90. nk bank
22 y yip	45. tw twin	68. zz buzz	91. ck back
23. j jig	46. scr scrap	69. all ball	

Table 3. Percent Words Decodable in the Stories of Both Programs.

	First Grade						Second Grade					
Ginn Levels	2		3		4	5		6			7	
Percent Decodable	0%		15%		15%	43%		33%			57%	
Palo Alto Books	1	2	3	4	5	6	7	8	9	10	11	12
Percent Decodable	78%	62%	73%	54%	57%	78%	63%	53%	48%	87%	64%	78%

Table 4. Number and Percent of Monosyllabic and Polysyllabic Words Found in Selected Portions of Each Program, Counting Every Word in Every Tenth Sentence in the Stories.

Program	Monosyllabic	Polysyllabic	Total	Percent Polysyllabic
Ginn, Level 3	114	7	121	6%
Ginn, Level 5	488	90	578	15%
Total for Ginn	602	97	699	14%
Palo Alto, Book 2	151	2	153	1%
Palo Alto, Book 6	415	23	438	5%
Total for Palo Alto	566	25	591	4%

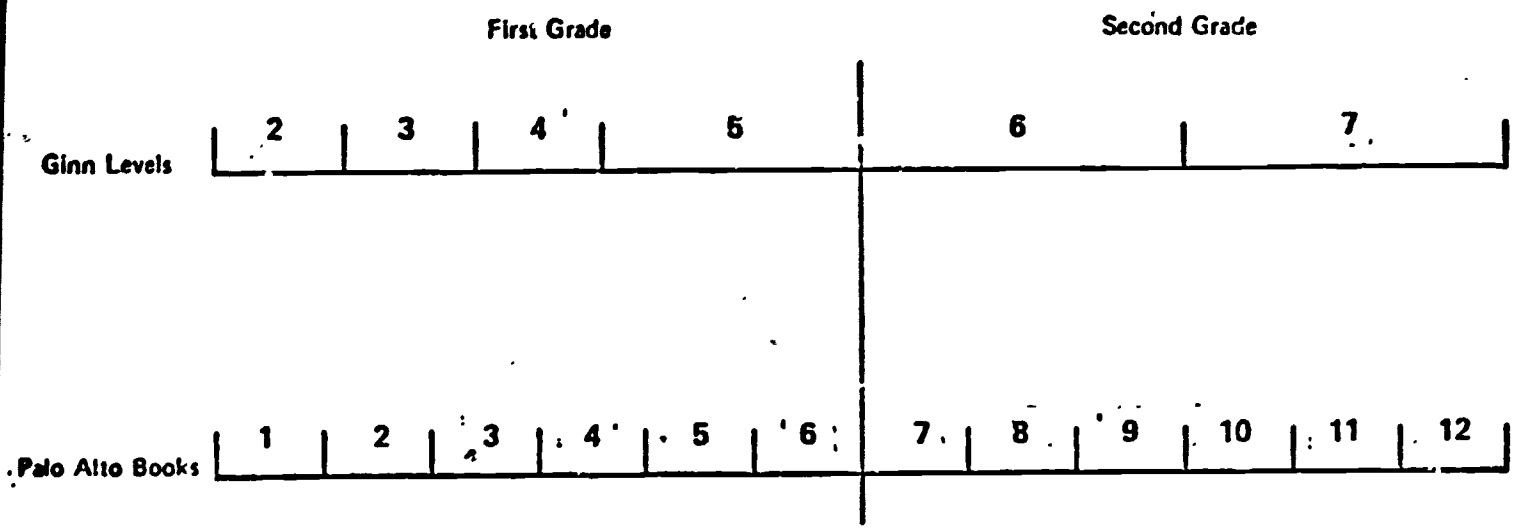

Figure 1. The relationship among Ginn Levels, Palo Alto Books, and the first two school grades.

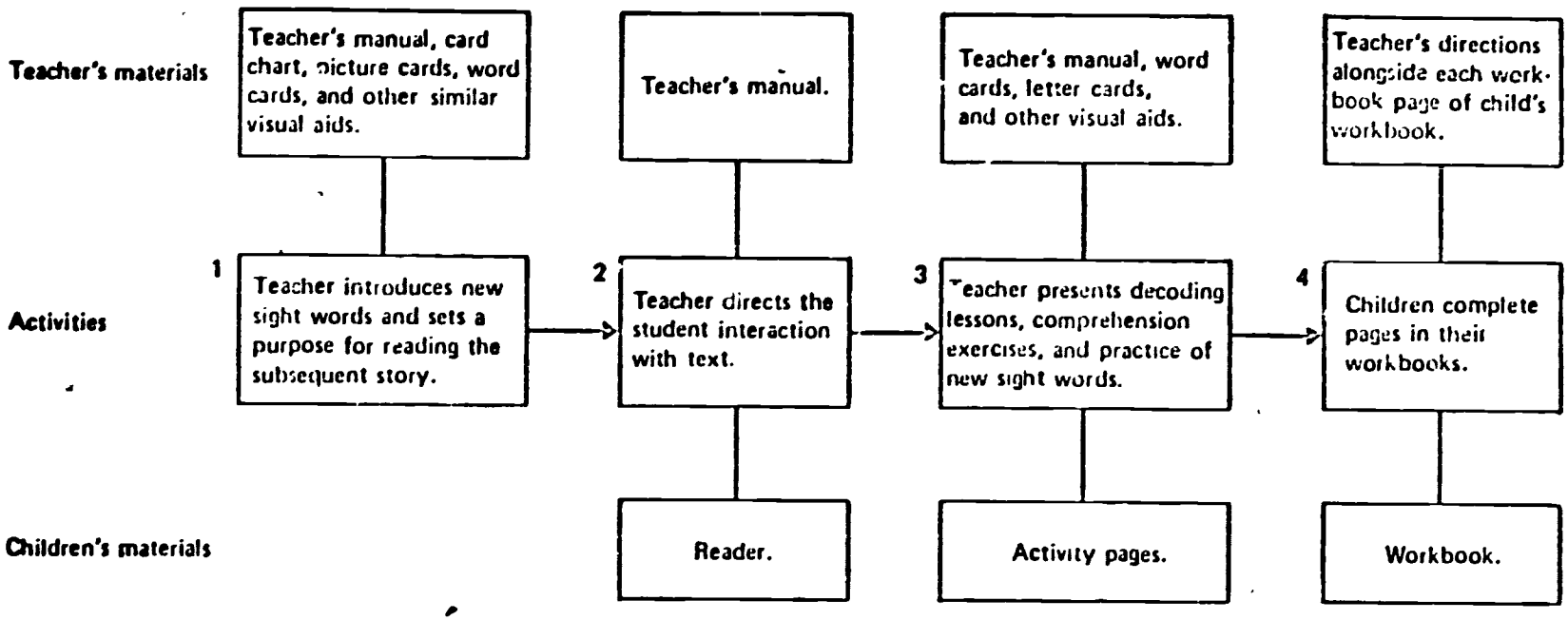

Figure 2. General flow of a typical lesson in the Ginn program.

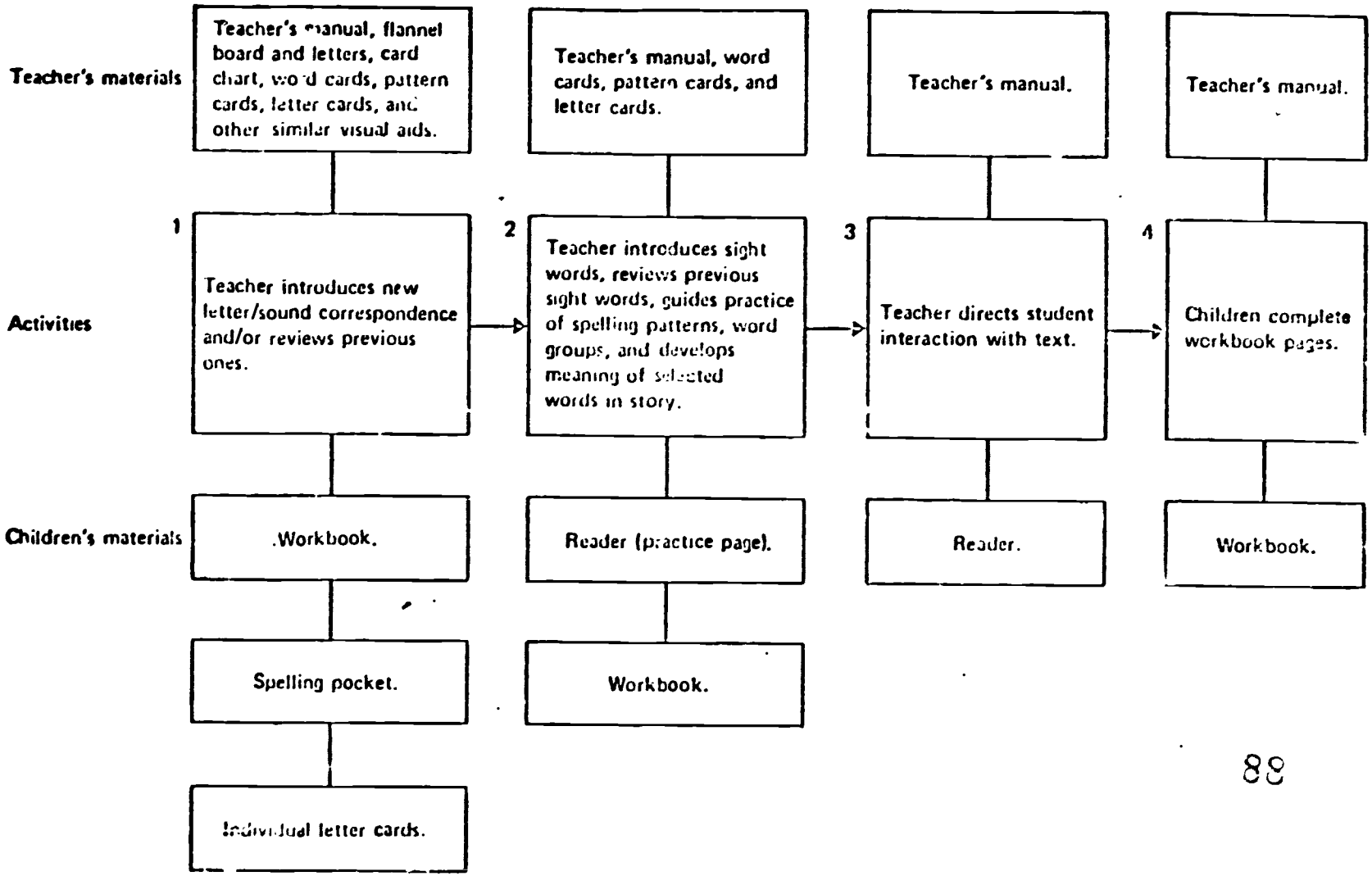

Figure 3. General flow of a typical lesson in the Palo Alto program.

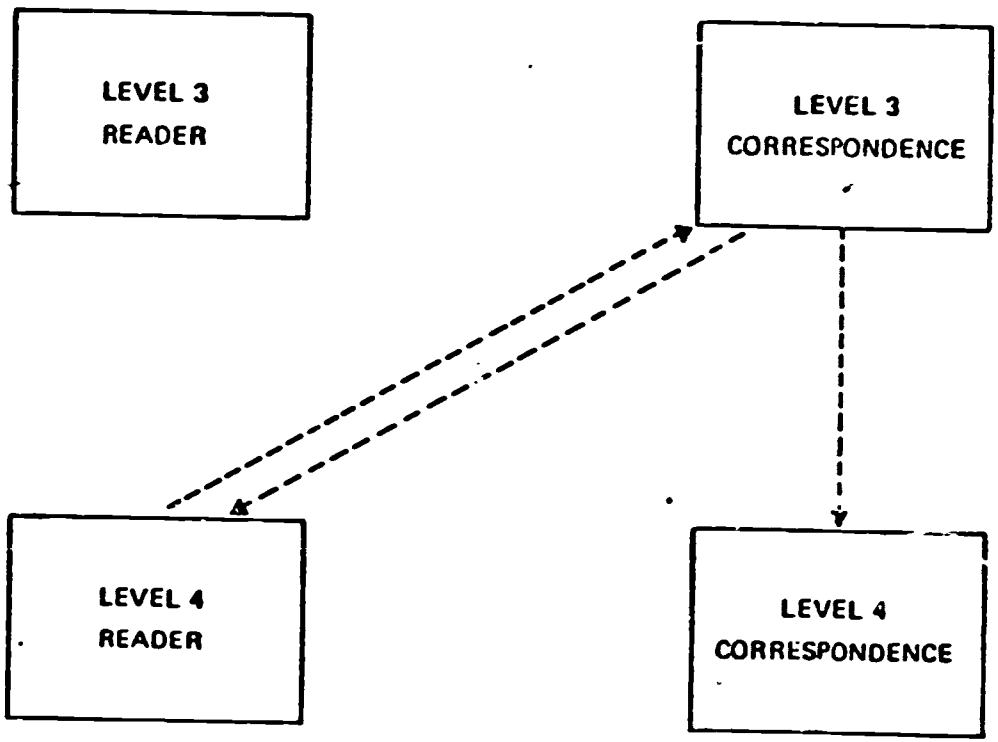

Figure 4. Relationship between letter-sound correspondence and connected text in the Ginn Program.

OPEN DISCUSSION OF BECK AND BLOCK PRESENTATION

VENEZKY: In one of your slides you showed the Ginn and Palo Alto approaches to teaching the short "i" sound, and you seemed to be quoting from part of the Ginn program where they talk about vowel sounds and they tell teachers to say, "Listen for the vowel sound."

How is the dichotomy of vowel-consonant taught in the Ginn program? And is it, in your mind, rational to teach at that level? That's first grade, isn't it?

BECK: We have a section in the paper about that, that there wasn't time to present here. Ginn even goes beyond calling the short "i" a vowel; they call it an "unglided vowel." Then when the long "i" is introduced in CVCe words it will be called a glided vowel.

We believe that these labels are no more helpful in learning to read than the old labels of long and short vowel, and we question why they are used. Now, if there are reasons for children to be able to identify letters as to vowels or consonants--and perhaps there are, in terms of learning syllabication--then we suggest that these labels be taught more directly at the time they are needed for a particular task. But I am not convinced that knowing the "unglided-glided vowel" labels facilitates acquiring decoding skills and I don't recommend it.

BATEMAN: Very closely related to that, it seems that the children not only need to grasp the vowel sounds concept, but also the concepts of middle, same, beginning, and next, and that the teacher is to get them to respond in unison. Two questions: One, does the program assume total responsibility for teaching all of those concepts to all of the children and, secondly, <u>how</u> does the manual

teach the teacher to get the children to respond in unison?

BECK: Well, I don't think it does; I think there is a lot of leeway.

BATEMAN: It doesn't?

BECK: It doesn't say how to get children to respond in unison, but I think that teachers who work with small reading groups have ways of doing that. That's something that I wouldn't be too concerned about.

As far as the concepts of same, different, beginning, middle, and end are concerned, Level One of Ginn does spend time in attempting to develop those concepts. It is not clear to me how they develop them, however, and I am not sure that the way of teaching these concepts is effective for the particular learner with whom we are concerned.

BATEMAN: Their Level One is the readiness level?

BECK: They don't specifically call it a readiness level, and we described very carefully in our paper the reason for our treatment of Level One. Level One of Ginn has four modules. In order to determine where reading instruction began and readiness left off, we decided to adopt the rule that reading would begin with the first correspondence or first printed word that was taught in a way that it needed to be read by the learner. Using that definition we would clearly consider the first two modules as readiness because they work with cognitive abilities and general language abilities. In module three of Level One of Ginn, 44 correspondences are taught. While we think that the learner we have in mind would become "sensitized" to sounds and letters with these 44 lessons on

letter-sound correspondences we doubt very much whether he or she would retain those correspondences and be able to use them for actual reading. For that reason, we did not include module three in our analysis. Also, Ginn clearly reviews all the letter-sound correspondences, or re-introduces them, in Level Two. We felt we were justified in removing Level One from our analysis of Ginn's reading instruction. We do make some comments about Level One in the paper, and we analyze it somewhat in terms of how much time is spent developing cognitive abilities.

KLOPFER: Isabel, I am very much interested in the distinction you made between applying science and applying art to your analysis. And I wonder if you would give us some indication of which of the principles you actually applied? By Science, I presume that you mean that there is some research basis for a particular principle, and by art, that there is some experiential feel for that principle.

You know, one way may be to focus the question a little bit. Let's take the example you gave of applying to reading text the correspondences that have been learned in the immediately preceding level, which you pointed out was well done in Palo Alto, and not so well done in Ginn. Now, there is a principle; that is, that immediate application is the way to fix correspondence? Question: Is that an example of a science or an art?

BECK: I guess my distinction between applying art and applying science to an analysis is partly a matter of sensing versus counting to determine the presence or absence of a principle. But I also know that good science is dependent on both good intuition and analytic techniques for gathering empirical evidence so maybe my distinction is not a very good one. What I mean is, after deciding on

the basis of theory, research and intuition what is important enough to be analyzed and doing the analyses in a fairly scientific way, you still have to look at your results and extrapolate to try to realize how they all fit together in the classroom.

Having come to the research world in mid-career, I probably had the best lesson of the importance of hard data on the basis of conceptualizing this paper. I have been around "reading" for a long time, and as we looked through these programs for a number of weeks before we started working on the paper, we derived some definite opinions about both programs. I think if there were any way to assess after we did the analyses, the correctness of what we had sensed before we did the analyses, we probably would have been about 75 percent right and 25 percent wrong. Does that do anything with the question?

KLOPFER: Well, it's a good lateral move.

BECK: Then I did exactly what I wanted to do.

SINGER: Two questions. The first one is, using Rebecca Barr's work on pacing instruction, what kind of insight do you get into the two programs and into how they handle individual differences in ability to learn?

The second is another empirical question: Did you do, or do you plan to do any studies on youngsters actually learning under both of those programs?

BECK: Your second question is particularly pertinent. In the paper we point out that the data we generated are about the programs themselves, not about how kids are using those programs. Since the programs were not seen in operation, we

obviously told only part of the story. Any final word, if there is such a thing as a final word, would certainly require studying the programs in a variety of classroom situations.

I don't think I can really answer your question about pacing. Ginn does work very hard to allow flexibility. The instructional time can be adapted in a variety of ways in Ginn, because its correspondences and skills sequences are not connected with its story component. Ginn does allow more flexibility in what can be taught, and when. In Palo Alto, on the other hand, pacing is much more structured and much more rigid. Everything has to be done in a certain sequence. But I can't tell you anything about time, until we observe the program in operation. In the paper we do make some estimates about time in the early levels and compare those. A lot more time is spent on skills development in Palo Alto than in Ginn.

FREDERIKSEN: Did you make any attempt to analyze the structure of the stories at the semantic level?

BECK: We got some false starts on it.

FREDERIKSEN: And also in terms of match/mismatch to oral language?

BECK: No, we didn't do that, because we focused primarily on phonics instruction, but it would be very interesting to assess the closeness of the match to oral language in the more complex printed materials in the upper levels.

FREDERIKSEN: Could you give us an idea of what the first story and the last story in the sequence would be like, so that we could get a sense of the

progression at the semantic level?

BECK: The first story, which is about ducks in a park, appears at Level Three, as I remember. The last story at Level Seven is much more complex.

FREDERIKSEN: Was there any effort made to order the complexity of the stories themselves?

BECK: You mean by content? Yes, I think it's apparent that the program developers attempted to order the stories according to increasing complexity of content.

BLOCK: When you look at the story materials in a general and cursory fashion, you can tell that the text becomes more complex. We did not do the kind of careful, deeper analysis of aspects of semantic and syntactic complexity that could be of great interest. We chose not to focus on that, for this particular paper.

POSNER: One thing that this kind of comparison leads to is the attempt to combine the best parts of each program. At the end of your talk, however, you said something about the importance of an underlying philosophy or principle of organization. Do you think that you can lift out the best parts of different programs and still maintain an underlying philosophy?

BECK: I think that combining the best aspects of both programs would be a very good thing. I don't think the two different program aims need to compete with each other. For instance, phonics instruction could be made more productive by

using the Ginn sequence and made easier by using the Palo Alto instructional strategies. The pool of sight words in Ginn seem to be good words, while the Palo Alto words do not seem to be strong "kid" words, words that children would identify with. We have tried several ways to elucidate the sense of a good set of words, and a not-so-good set of words, but we haven't gotten anywhere, yet; maybe the differences are more apparent than real, but I don't think that is competing. I don't think that good, lively exciting stories would compete with high-quality phonics instruction, so I don't see where the fusion of the best elements of both programs would detract from any one element.

RESNICK: But it could be that your question, Mike, was directed towards whether a teacher could combine the good pieces of those two programs. Was that what you meant?

POSNER: It's a better question, go ahead with that.

BECK: Well, one of the things that is clear about reading instruction is that in the classroom it's very difficult to change the sequence of the correspondences or words that are being taught. The scope and sequence of whatever is being used usually stays the same. The instructional strategies can be amended more easily.

Despite available evidence that indicates that the strategies suggested in teacher's manuals do influence the way teachers teach reading, I believe that those strategies could be altered more easily in the classroom than the program's sequence of content, i.e., the correspondences, words and stories.

Now, what would you do in the case of Palo Alto, which has stories that are very limited in content and sentence structure? If I were working with Palo Alto in the classroom, I would add a language experience component, because I think that, while there would be initial gains using Palo Alto, there would likely be a depression later, partly because of the lack of richness and complexity of the stories. That's my hunch.

GOODMAN: Did you look at the publishers' claims and descriptions of the programs and compare those to what you found, in the kind of analysis you used, and the emphasis the particular publisher placed on the things you singled out as significant?

BECK: Yes, in terms of the target population, we noted that Ginn did not claim to be a program for students with learning difficulties. But we also thought that because Ginn has such a wide adoption, it would be inevitable that children who have difficulty learning to read would be taught through Ginn. That's why we did delve into the programs' descriptions. Ginn has seven strands, three of which are described as core strands: decoding, comprehension, and vocabulary. The other four strands are considered application enrichment strands. Ginn claims that the three core strands can be used without the four application strands. Therefore, we thought that it could be fair to compare programs that have roughly the same content, and the three core strands of Ginn are roughly equivalent to the total Palo Alto program.

CHALL: Isabel, I am interested in your point that the different factors don't necessarily contradict each other. Wouldn't the use of "strong" sight words be confounded by the fact that, if you wanted to have a lot of phonic regularity,

you would end up with wig, wag and zig and zag? Theoretically, if you say you have the strictest phonic method, you will have CVC words for a long time. Then perhaps you will end up with a reaction in favor of sight methods, where you will have those lovely strong words that children know.

So, in a sense, it seems that the Ginn program is more of a combination of both.

BECK: I don't agree that you have to only have wig and wag and zig and zag for a long time. There are other ways to introduce the correspondences. For instance, if you introduce double consonants, and the ing, you have many regular words available such as batting and sitting that take children away from the single syllable monotony. It is not necessary to stay with CVC words to maintain regularity. Besides, I don't think absolute regularity is essential. There are some words in English, like the word one, that have to be taught as whole words. There is no other way to teach them. So there are always going to be some whole words, and the rate and distribution and quality of those make a big difference in a program.

For instance, the Palo Alto program introduces almost the same number of sight words as the Ginn program does; yet Palo Alto is not nearly as exciting or interesting as Ginn, nor does it maintain the words through repeated use as Ginn does.

So why not introduce fewer words, and include some strong ones, and maintain them?

Kids can learn to distinguish between the ones you don't "attack," and the ones you do. They don't seem to be as bothered by them as we are.

SAMUELS: If you were a superintendent of a school with a compensatory program for a populatior of children with special learning problems, and you had to select a series, which would you select?

BECK: Palo Alto. But I would also give many in-service workshops on how to "beef up" a reading classroom. That's why I'm a little bit sad that the Ginn program with all of its richness, its literate environment, and its sense of the language has some aspects that our target population would have difficulty with.

SAMUELS: Which series would you select for children who have not been identified as students with "special" problems in reading? Would you still select the Palo Alto series, or would you go to the Ginn?

BECK: Well, at this moment, I would go to Ginn. Again, I would want to provide in-service workshops on phonics in order to simplify and make more concrete the Ginn phonics strategies.

RESNICK: She is having trouble, because she wouldn't really use either, and she is being very good about not saying so.

BECK: Yes, I would.

RESNICK: Isabel spent the last seven years developing a program which works along some of the lines she has outlined. This paper has outlined some of these

things, and her program will be analyzed by somebody else in our June meeting. People will have a chance to hear what somebody else thinks of it at that time. But the question is particularly tough for someone who has been involved in development, and who does have some ideas about possible applications.

GOODMAN: By compensatory education kids I assume you mean ethnic or cultural groups. On what basis do you decide that those kids need a different kind of reading instruction than other kids do?

BECK: I think we stated very clearly that in identifying our target population we had in mind kids who wouldn't learn to read easily. We went no further than that in defining those kids. There are children in all ethnic groups and in all SES groups who have difficulty learning to read, just as there are children in all SES groups who don't have difficulty. That's as far as I can go.

FREDERIKSEN: Suppose you chose the Palo Alto Program for the compensatory education children and the Ginn program for the other group, in what sense are the two groups going to be comparable, after they have gone through these programs? In what sense are the children going to finish up at the same point, or are you goirg to decide at the outset that the children will come out at different points?

BECK: I think that is an interesting question. One of the things we toyed with in doing this paper, was to point out that Ginn thrcugh it's three core strands and Palo Alto through it's total program claim similar outcomes; so what is all of this fuss, if indeed both programs end up doing the same thing at the end of third grade? I think that with the Ginn program as it is now, some kids would

experience some early failure in acquiring the code. I think in the Palo Alto program, kids would acquire some of the code, but unless the program was beefed up in literary quality in the beginning years, there would be some depression later.

FREDERIKSEN: Yes. But the programs are very different in terms of the kinds of learning experiences the children are having, especially in terms of text, in the stories. I think it is important to expose them to different kinds of reading experiences, and it seems to me that this is an example of why selection shouldn't be made soley on the basis of the decoding components. You have to be concerned with where the child is, with respect to the whole process, at the end of the sequence.

BECK: I agree. However, there's no point in "exposing" them to rich texts if they can't decode. But if they are learning to decode they ought not to be saddled reading dull material. Therefore, if I were using the Palo Alto series, I'd supplement the material with exposure to other language experiences and other texts. If I were using the Ginn program with the kids who were having difficulty learning to decode, I would add the kind of phonics that I think would help.

GLASER: Isabel, what are your thoughts on the introduction of correspondences; that is the content of correspondences and the sequence in which they are presented? You said that one program was regular and one program was diverse, but what are your thoughts not on the method of teaching correspondences, but on the introduction of the content and its sequence? What kinds of principles lead you to say that one is better than the other?

This slide shows the secretary, who really runs the school. This is the homemaker, who works very closely with the school and the parents in the community. All of my children walk to school; we don't have any buses. It's a neighborhood school, based on a neighborhood concept.

And this is a home where children are learning how to sew and do some other things. We found that even though we give the boys and girls things at school and at the Salvation Army, a lot of times they don't know how to really take care of things, so this lady works with the homes. She also takes care of attendance and other things that the boys and girls need.

This is one of the four people on our janitorial staff.

This is our cafeteria staff. We have a white manager; all of the rest of the ladies are black.

That's a Title I nurse. She has a cluster of schools in our area, and she is on call for our boys and girls whenever we need her.

This is our speech therapist, she is with us three days a week as part of our supportive services. She works in the classroom with students and teachers. Sometimes she will pull out boys and girls, but her work is mostly in the classroom.

In this next slide you see the teacher following up an activity that the speech therapist worked with during the day.

This is the station wagon, which takes boys and girls with extreme reading problems, motor sensory problems, and other problems to a center. They work at the center for about an hour and then they are brought back to the school. We take care of most of our problems right at school, but students who have extreme

BECK: Well, I tried to mention a couple of those and to indicate why we strongly favored the Ginn approach.

One favorable aspect that is important is Ginn's tendency towards diversity. It doesn't lock kids into single letter-single sound misunderstandings about the language. The other is that Ginn's is a highly generative sequence; it produces lots of good "kid" words. Those are the kinds of things that we looked at to determine why we liked one sequence better than the other.

RESNICK: Well, I think we ought to turn to our bonus of the evening, which is Lillian Harrison's presentation.

HARRISON: I don't have a prepared paper, I am just going to show you these slides, and try to show you one or two things, and hope you won't ask me too many questions.

In our school we believe that boys and girls will do better in an environment where they can achieve and where people understand them. We try to talk a lot about positive thinking, and about what teachers expect from boys and girls.

SLIDE PRESENTATION

We have about 109 schools in this district. This is a little school in the ghetto, with about 618 black students, and a 50/50 ratio of black and white teachers.

problems go to a learning center.

We have a few kids with emotional problems. These kids are in the regular classroom. and this lady comes over and observes them and works with them and discusses the problems with the teacher and others who need to know about the problems. I may discipline the kid one way, and the kid should really be handled another way. So we try to talk about this, and she works very closely with us. She isn't a part of the school system; she is apart of the political scene, but she works with the schools.

This is the music teacher. She is in the school about three days a week also, and she works in the classroom.

We really try to have an integrated day, but since we have support services only on certain days, we can't really have a truly integrated day.

And this is the library. We have a full-time librarian, and the library is a very active place with boys and girls going and coming all day long.

This is the PE Center. We have a lot of space, a whole block. We are in the country so we can afford to have a lot of space.

And this is the counselor. She works in the classroom and other places with boys and girls. Sometimes they just talk with her on the campus. Her office is always open to them.

This is our reading teacher. She is called a helping reading teacher. She works with the teachers in the classrooms. We don't have a remedial teacher. This lady will come into the classroom and work with the boys and girls, and as I said, work with the teachers and with new teachers. Sometimes she will do something, a demonstration in the classroom. We do have a lot of time for

in-service in Title I. Often the teachers and aides are excused during the day, and a paid substitute is brought in.

Children are encouraged to bring things from home. That's a crawfish, as we call it, a crayfish as you call it. This little boy found it, and he brought it to school. Everybody seemed to be excited about it, and that excitement probably spilled over into what happened in that classroom that day.

This little girl is putting her name into one of the slots. We use the language experience approach quite a bit in the classrooms. The children put their names in the slot they want to work in. They move their name from time to time during the day. This gives them and the teacher a chance to see where they are. Notice the word-walls in the background, we use a lot of that.

Here is a teacher sharing a book with the class. We believe that the teacher should read to the class at least once a day, because she is sort of a model for these boys and girls, since many of them do not have models in the homes. That's an aide in the background. We have full-time aides in all classrooms.

This is a teacher using the basal approach to teaching some skills in reading. We think that the use of the language experience and the basal are not enough in themselves, so we combine several methods and draw upon several ideas.

This is a cooking scene in the kindergarten classroom. This is always exciting. You wonder how much they are learning from words, but they do learn quite a few words there. Some of the boys and girls are more excited about the cooking and the eating afterwards, than they are about the words, but we feel that sells them, too.

This is really the heart of language experience, the teacher working with one child at the writing center. The kid in the background is working on something he wants to do, and the other kids are busy doing something else. But the writing center is where the teacher can really discover the positive things about the children and encourage them. The center gives the ghetto children an opportunity to be with the teacher alone, and this is something that they really need.

This teacher was helping one child correct her work on the board. This is a fourth-grade classroom, and these other kids just decided that they wanted to hear the story.

The teacher just put a picture up there, and of course, with the children able to select where they wanted to go, this child selected to go up there. You can teach may things from that one idea. We try not to do too much correcting, though; it sort of shuts the kids off. We try to give them a chance to correct themselves, and then we try to find out what mistakes they make and try to help them express themselves.

FREDERIKSEN: Can you tell us what task was there? Was it to make up a story?

HARRISON: Yes, this child developed a story from a picture. This is what she selected to do. She ran into some difficulty, and she asked the teacher for some help. In the process some others came over. They are encouraged to use the dictionary, the language book, the word-wall, or whatever else is available in the room, but sometimes they still run into trouble.

These boys and girls are locating words from a magazine. They may vary the words that they are looking for. Sometimes if a child is having trouble with the sound of a word, the teacher will encourage that child to find pictures with that sound. These boys and girls learn quite a bit from that. At the sharing time, they will share their pictures. They are encouraged either to paste them or arrange them in some order. They work in a seqence based on whatever the task is.

The material on the floor is what we call a galley sheet in Van Allan's. This girl is sharing her galley sheet with another child. Sometimes one person will do the writing, and the other one will do the illustrating. Here they are sharing this galley sheet.

Sometimes they make up their stories on a poster. In this particular scene the teacher was trying to teach the child sequence, in other words, how to put one thought or idea on that chart on one page, and then another idea on another page, and illustrate it to really bring out the idea. We have some very good teachers in this school.

This is an aide in a first-grade classroom. She is reading a story from a book that a child made. We encourage the children to make books, and we encourage the aides to use them in the reading period. We also encourage the parents to read the books the children have made.

This is the section in which boys and girls are encouraged just to read on their own, and they are just enjoying their books. The teacher will not ask any special questions after this session. We try to encourage them to read, to become interested in reading, and to have a desire to read.

This is what we call the listening center. Boys and girls may have something special to do. They may have a pack that has been developed by the teacher, maybe a film strip and a book, that will go together. Sometimes they are at this center just to listen to some music or something else that may give them some ideas for painting or drawing. Sometimes it's structured, and sometimes it's unstructured. It depends on the group, and whatever the teacher feels a particular child will need.

This is what we call the discovery center. Usually we find a lot of boys at the discovery center, but some girls use it too, especially now that we have this new liberation.

These kids went to the zoo, where they found a caterpillar. They are trying to watch it as it turns into a butterfly.

In this classroom, this lady always has some kind of a center built around a particular month. Here she has some phrases on a turkey. The kids will get the turkey with a certain phase on it and try to develop some stories from that.

This boy got some clippings from the last election, and he is working on some of the winners. He made a poster. They interviewed some of the candidates who came out to the school and spoke to us. Those who were running in our district were especially anxious to speak to the boys and girls, so they would talk with their parents about voting for them.

This is a game called "Concentration," which we believe helps the boys and girls learn a lot. This is a math game.

These boys built the state capitol. As you know, we have one of the prettiest capitols in the United States. Many of the materials from the capitol were products of Louisiana, and all of the history of Louisiana can be seen in the capitol. These boys did a lot of work on it, and the class enjoyed it. Notice that on the door the teacher has a little slot ma ' lake me home." Those are some goodies that the boys and girls may take for enrichment as they go out at the end of the day.

This is from the unit on the neighborhood. This is a third-grade class, and these boys and girls show their homes in relation to the school. They tell the class whether it is north, east, south or west. That is the map in the background. They diagrammed all of the streets and important places in the community, like the fire station. (It's a totally black community.)

Here we see the student teacher. We work very closely with Southern University, which is located about nine blocks from the school. It's the largest black university in the world.

Here we see an aide with a very crude file box. Here she is checking a child. We believe that the boys and girls need a certain amount of skill development, and they need to be checked every night. Here she is checking skills with the child.

In this picture we see the teacher. We use the Fountain Valley material, which has a cross reference of basals. It will show you what basals to use if you are developing a skill in a particular area. An excellent profile sheet accompanies this series. We use it to give some balance, structure, and stability to the variety of programs and approaches that we use. It's easy to explain to parents, who like to know "Where my child is."

Here we see boys and girls working on their own. We like them to compete with themselves, not with others, in areas where they may really get uptight.

And thank you for listening to me and good night.

RESNICK: Thank you.

END SESSION